



Providing Solutions to the Nuclear Industry

## STATEMENT OF QUALIFICATIONS

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## Introduction to Babcock Services

The world's economies are growing ever more dependent upon energy with an increasing emphasis on sound environmental stewardship. The result has been escalating need for experienced professionals to support this industrial paradigm. Babcock Services, Inc. (BSI) was founded with the vision to provide expert engineering, consultation and remediation services to the nuclear industry.



BSI began operations in 2000 and, in the decade since, the company has grown from a small, staff-augmentation provider to a diversified services and remediation company. Our core management team has assembled an ever growing collection of seasoned professionals who understand more than the regulatory environment; We focus on our customer's needs and have the experience and proven track record to the job done in a safe and compliant manner and equally important, on-time and in-budget.

Built upon the decades of experience each of our team members bring to the organization, our strengths include Project Management and Project Controls experience at utility owned power

We **focus** on our customer's needs and have the **experience** and proven track record to get the job done in a **safe** and compliant manner and equally important, on-time and **within budget**.

generating facilities in the United States. This experience has been gained throughout all phases of projects from initial development and licensing through operations, maintenance as well as final site decommissioning and closure.

Equally, BSI has extensive experience in remediation activities. Based in Kennewick, WA – Home to the Department of Energy's Hanford Site – BSI began by providing expert support services to various prime contractors at Hanford. BSI has since, assembled an ever increasing portfolio of successfully completed clean-up and remediation projects both in the United States and abroad.

## Corporate Principles

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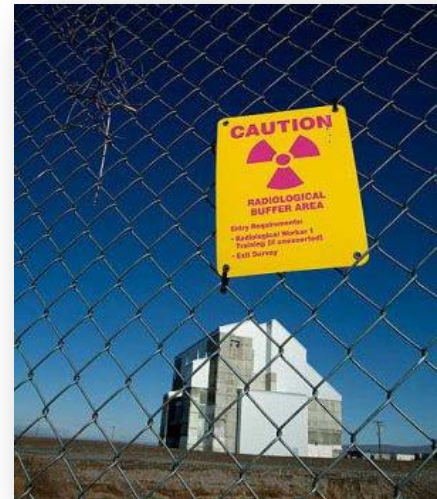
BSI engenders a simple yet powerful set of operating principles in all our personnel:

- Safety Drives Completion
- Cost Certainty
- Progress in a Controlled Fashion
- Management of Risk
- Process Validation through Use
- Operations within Funding

These values drive BSI's personnel to deliver more than just completed tasks, but solutions.

With BSI, safety is not a priority - ***It is a value.*** While priorities can be easily changed to suit a particular situation or schedule, values can't. Once something becomes a value to an organization and its staff, it is less likely to be compromised for the sake of production or budget schedules. Every BSI employee carries this value to every project, every day.

Inherent in the experience of our team is the knowledge and engineering strength coupled with solid expertise that enables us to perform our tasks in a safe and effective manner and to meet all of our customers' specified requirements and expectations.



## Core Competencies

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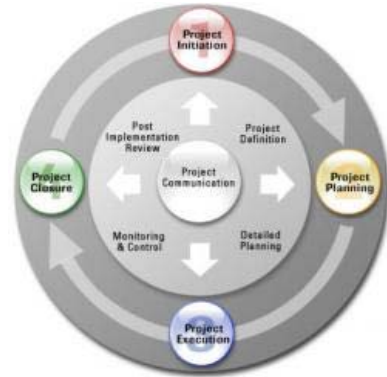
BSI is primarily a project-oriented professional services firm. We specialize in project management, construction management, radiological engineering, and environmental engineering and remediation services. The sphere of our experience encompasses the areas of facility operations and maintenance, environmental clean-up, facility decommissioning and waste management in government, commercial and industrial arenas. These services are provided to a wide range of customers within the nuclear industry as well as in many different industrial settings including fossil power generating plants, petroleum and chemical refineries, commercial production plants, and shipyards.

## Project Management / Project Controls

With in-depth experience in all phases of the project life cycle, from baseline planning to project closeout, BSI has the capability to provide total project support to best support your needs.

BSI has an experienced team of project managers, engineers, schedulers and field supervisors. Our personnel have extensive knowledge in key disciplines including:

- Chemical
- Construction Management
- Environmental Engineering
- Mechanical Engineering
- Planning
- Civil
- Cost Estimating
- Industrial Hygiene
- Regulatory Compliance
- Structural Engineering



BSI has a proven track record of providing knowledgeable, trained, and experienced individuals supported by a comprehensive and integrated project controls system. We have demonstrated success across a variety of facilities in both nuclear and non-nuclear arenas.

## Radiological Controls



BSI has an extensive staff of experienced radiological engineers combined with subject matter experts unique to operational radiological controls, waste management and radiological decommissioning. Combined, several of the principle managers and engineers of BSI have over a century of experience in the development and application of radiation protection standards, radiological engineering, ALARA, radwaste, facility assessment and site close-out. We also provide expertise in environmental health and safety, pathway analysis and dose assessment. Our

personnel have years of in-the-field experience as Radiation Protection Managers, Radiological Engineers, ALARA Engineers and Radwaste Managers at locations throughout the U.S.

We are well versed and uniquely experienced in radiation protection, remediation and decommissioning activities. In addition, BSI has the proven capability to provide radiation

protection field supervision and technician support, either as part of an integrated project team or to supplement your existing staff.

## Radiological and Environmental Decommissioning

Over the past several years, BSI has specialized in providing our customers our expertise in the area of nuclear facility decommissioning, particularly with the implementation of Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) protocols. To date, BSI has developed and implemented radiological Characterization Survey Plans, Final Status Survey Plans and License Termination Plans at multiple facilities and our personnel have participated in nearly every major large commercial decommissioning project within the US. BSI's principle members have played instrumental in the development and implementation of the current interagency guidance governing decommissioning and Final Status Survey (MARSSIM). As a company, we have gained considerable knowledge and insights in decommissioning planning and decision-making through our participation in these projects.

Our **personnel** are **experienced** in working closely with federal, state, and local **regulatory agencies**.



BSI has successfully implemented remediation and site closure activities at most of the NRC-regulated commercial power reactor decommissionings to date, including successfully achieving license termination at Shoreham, Fort St Vrain, Maine Yankee and Connecticut Yankee.

BSI has also supported the decommissioning projects at Yankee Rowe, the Brookhaven Graphite Research Reactor (BGRR), the Berkeley Magnox reactors and the Chapel Cross Magnox reactors in the United Kingdom. In addition, BSI

successfully terminated the NRC license on behalf of the DOW Chemical Company for their TDCC Bay City Michigan storage facility, which involved the remediation and survey of 32 acres of radiologically contaminated soils.

Our personnel have **participated** in nearly **every major** large commercial **decommissioning** project within the US.

BSI personnel have played a key role in the termination of the radioactive materials license for the Worcester Foundation for Biomedical Research and participated in the characterization and remediation of the Stoneybrook Former Weapons Area in Ludlow, MA. and the Molycorp facilities located in Washington and York, Pennsylvania.

Our personnel are experienced in working closely with federal, state, and local regulatory agencies including the USNRC, the US Department of Energy, the US Environmental Protection Agency and state Environmental Protection organizations on the behalf of our customers.



As a result of this experience, our Radiological Engineering staff is recognized as a leader in the development and implementation of characterization programs, Final Status Survey programs and License Termination Plan development. This experience is among our most valuable assets. We provide this corporate expertise to our clients to supplement the on-site project staff that we offer – This provides our customers definable “value-added” advantages in these critical areas.

## Remediation Services

Babcock Services has participated in safely cleaning up waste sites and burial grounds located predominately at the DOE Hanford Site in Washington State. Activities included liquid waste disposal cribs and trenches, buried pipelines and areas contaminated by operational leaks and accidental spills. Buried materials included chemically and radioactively contaminated materials, such as asbestos, lead, chromium, carbon tetrachloride, strontium, uranium, cesium and tritium.

**BSI provides** independent support and problem solving **solutions.**



BSI, along with the pre-selected subcontractors, has provided all equipment, key personnel and qualified, trained labor to remediate contaminated waste sites in a safe, compliant and cost effective manner. Key employees included Project Managers, Superintendents, Health and Safety representatives, Samplers, Planners and Administrative Staff.

Our personnel provide management oversight of remediation activities, coordinate interfaces with multiple project teams and cross functional organizations. BSI provides independent support and problem solving solutions. We develop optimization plans, resource loaded schedules and the means to succeed.

Babcock Services, Inc. personnel have been involved as managers and leaders in the following significant projects at Hanford and elsewhere:

- 100 BC Area Reactors Effluent Pipeline Removal
- 100 BC Remedial Action including the 118-B-1 and 118-C-1 Burial Grounds
- The 100 K Area 118-K-1 Burial Ground Category III facility
- The RCRA closure of the 183-H Solar Evaporation Basins
- The 100 N Area 116-N-3 and 116-N-1 Crib and Trench waste sites
- DOE's UMTRA program Grand Junction, Colorado, residential and commercial business remediation.



## Services Offered

BSI provides a broad range of operational, technical, maintenance and professional engineering services from baseline evaluation and characterization, initial project planning and engineering through project management and performance to readiness assessment and project closeout. Using a variety of contract vehicles that provide the best value possible, we have the infrastructure to provide technical and operational services in the following arenas –

### Project and Construction Management

Experienced and qualified professionals for large-scale start-up project management (conceptual design through readiness review) to small-scale projects with specific scopes of work. Range of services; construction management, field supervision and safety.

### Program, Procedure and Plan Development

Demonstrated expertise in the development of programs, plans and procedures, including Site Close-out (LTP), Characterization and FSS, Sample and Analysis, Health and Safety and Operational Radiation Protection Plans and Procedures. BSI possess a proven field capable set of Operational Radiation Protection procedures that can be easily adapted and implemented to meet client requirements.

### Regulatory Compliance

Industry recognized professionals with extensive experience in the application of Federal, State and Local regulatory requirements in a field environment.

### Demonstration of Compliance with Facility and Site Release Criteria

Unmatched ability in the application of MARSSIM and NUREG 5849, Survey Design and Implementation, DCGL determination and use / application of dose assessment computer software (such as RESRAD and D&D).

### Planning/Estimating/Scheduling

Work package planners and estimators, procedure/technical writers, activity and WBS level schedulers, and system/equipment engineers.

### ***Decommissioning Preparedness & Program Assessment***

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Detailed Cost-Benefit Analysis Development, PSDAR Development, Evaluation of Cost Estimates, Initial D Plan Development and Staff Planning

### ***Turnkey, Project and Task Remediation and Decommissioning Services***

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Provide Project Management, Engineering, Planning, Scheduling, Technical, Implementation and support services related to facility and site remediation and decommissioning/deactivation as well as environmental restoration projects.

### ***Internal Assessment and Readiness Review Support***

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Preparation and performance of formal audits, reviews and assessments. Readiness review support prior to system/facility start-up.

### ***Training Program Assessment, Development and Implementation***

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Formal baseline evaluations to determine type and level of training program needed as well as assessments of existing training programs to identify areas for improvement. Develop, upgrade, and implement training programs as directed by the customer.

### ***Structure and Material Decontamination Techniques***

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Application of various decontamination techniques from the performance of simple hand cleaning to the application of innovative and new decontamination technologies.

### ***Operational Radiation Protection Applications***

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Field work coverage, exposure control (ALARA), radiological surveys and surveillances, RWP compliance, posting and access control requirements and unrestricted release protocols.

### ***Engineering Design and Review***

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Radiological, equipment and system engineers with degrees/expertise in all major disciplines. Design and authorization bases development and review services.

### ***Technical Support Activities***

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Expertise in the areas of Dosimetry, Radiological Instrumentation maintenance & control, Chemistry & Radiochemistry, the use and maintenance of Analytical Counting Equipment and sample analysis.

### ***Hazardous & Radioactive Waste Handling & Disposal***

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Technical expertise in the characterization, handling, packaging, transportation and disposition of Hazardous and Radioactive Waste materials.

### ***Quality Assurance and Quality Control Program Development and Implementation***

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Provide procedure development, implementation, audit and surveillance for new and existing QA/QC programs.

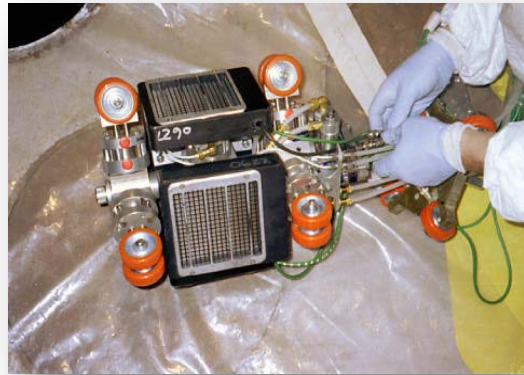


## Relevant Projects

Most notable among our achievements, BSI has enabled customer success at the Hanford Nuclear Reservation as a pre-selected subcontractor to CH2M Hill Plateau Remediation Company by providing scores of experienced support specialists across a broad spectrum of disciplines.

At the Bruce A Restart Project in Tiverton Ontario, BSI personnel are facilitating the successful restart of Bruce A Units 1 and 2 in their lead project planning and scheduling capacities.

At the Chapelcross and Berkeley MAGNOX Reactors in the United Kingdom, BSI was the (prime) contractor in a complex clean-up of key piping systems involving in-house designed and built robotic crawlers. And, at the Public Service Electric & Gas Salem & Hope Creek Nuclear facilities in Hancocks Bridge, NJ, BSI enabled customer success by providing key management support and planning during operational outages.



## Highlighted Projects

Following is a selection of projects BSI has participated in either as a turnkey solutions provider or providing engineering and/or support services.

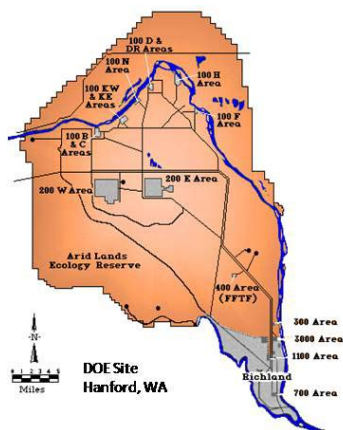


### Hanford Plateau Remediation Project

**Role:** Management & Engineering Services

**Period of Performance:** Oct 08 to Present  
**Scope:**

- Project Controls/Scheduling & Work Planning Support
- Provide field management support services to support work tasks as directed in the Plutonium Finishing Plant, the Fast Flux Test Facility and the 100K Area
- Provide support as directed in the areas of project transition, solid & liquid waste treatment and disposal, groundwater management and soil and facility remediation and disposition.





**Bruce A Restart Project**  
Tiverton, Ontario Canada



**Role:** Management & Work Control

**Period of Performance:** July 08 to Present

**Scope:**

- Project Management, Project Controls / Scheduling and Work Planning Support
- Work control and task management for various aspects of the restart effort
- Program and procedure development and implementation.



**British Nuclear Group**  
Chapelcross/Berkeley, U.K.



**Role:** Engineering, Consulting and Project Controls

**Period of Performance:** Mar, 06 to Present

**Scope:**

- Facilitated the de-licensing of the Berkeley Centre nuclear laboratories and offices.
- Provided project management and controls to major projects including the "Vault" projects and, disposition of legacy waste
- Provided professional engineering for end-state management and waste disposition
- Filled several key engineering positions.



**PSEG Public Services Electric and Gas**  
Salem/Hope Creek Nuclear Stations



**Role:** Outage Management

**Period of Performance:** Aug 02 to Present

**Scope:**

- Provide key personnel for management of field work during outages of the Hope Creek & Salem units, including Containment & Drywell Coordinator.
- Assist with work control & planning during outage.
- Provide management of special projects under the oversight of client management.



**Westinghouse Electric Company**  
**Hematite Fuel Fabrication Facility**

**Role: Management & Engineering Services**

**Period of Performance: Oct 08 to Present**



**Scope:**

- Managed and developed Decommissioning Plan for facility, including derivation of site-specific DCGLs and surrogates
- Assisted Licensing with regulatory submittals and responses
- Re-evaluated site groundwater to significantly reduce risk profile
- Developed FSS program and procedures
- Rewrote & upgraded Radiation Protection and Emergency Response program and procedures.



**DW James Consulting**  
**Humboldt Bay Decommissioning**

**Role: Engineering Services**

**Period of Performance: May 09 to Present**



**Scope:**

- Provide Radiological Engineering & Radiation Protection Supervision as a subcontractor to DW James Consulting.
- Assist with the radiological characterization and preparation for decommissioning activities.



**NASA Plum Brook Reactor**  
**Decommissioning Project**

**Role: Decontamination and FSS Survey**

**Period of Performance: Dec 04 to June 08**



**Scope:**

- Survey and decontamination of embedded and buried piping systems
- Radiological Survey using pipe crawlers equipped w/ NaI, beta and GM detectors
- Developed "Release Records" for NRC that documented compliance with unrestricted release criteria
- Operation and maintenance of hi-pressure water-jet, high capacity vacuum, grit blast and rotating auger systems.



**Florida Power & Light Electric Co.**  
**St. Lucie Nuclear Power Station**



**Role:** Radwaste Services

**Period of Performance:** Jan 07 to Feb 07

**Scope:**

- Provided Radwaste Engineer & technician to assist client with the classification, packaging and disposition of legacy radioactive waste.
- Assist with the establishment of a temporary radwaste storage location.



**SA Robotics, Inc.**  
**Brookhaven Graphite Research  
 Reactor Decommissioning**



**Role:** Engineering, Consulting & Field Supervision

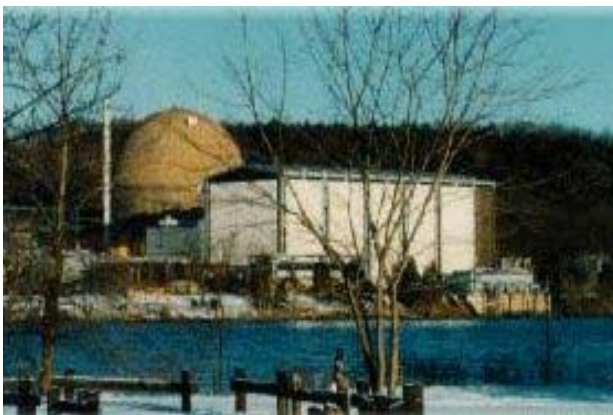
**Period of Performance:** Jan 08 to Aug 09

**Scope:**

- Developed the Contamination Control & ALARA Plan for the removal of graphite from the reactor.
- Assisted with the design, procurement and installation of the containment enclosure for the graphite removal.
- Assisted in the development of the material handling and waste packaging protocols.
- Filled key ALARA Coordinator & Field Supervisor positions.



**Connecticut Yankee Power Co.**  
**Haddam Neck Decommissioning**



**Role:** Engineering, FSS & Consulting

**Period of Performance:** Aug 03 to July 07

**Scope:**

- Assisted in development of baseline schedule and cost estimate for decommissioning
- Performed technical review of the License Termination and groundwater monitoring plan
- Developed protocols, procedures and plans to implement FSS Program, including technical basis, survey plans and release records
- Filled key management and engineering positions in the FSS Department
- Authored final report that terminated license.



**Energy Northwest**  
**HGP Turbine Building Demolition**



**Role: Project Management & Engineering**  
**Period of Performance: June 03 to Jan 05**

**Scope:**

- Provided project management and engineering to support RW Rhine with demolition of the HGP Turbine building to 15 feet below grade
- Scope included removal of all systems, including the turbine, condenser and steam system
- Subsequent actions included compaction and disposal of contaminated material, backfill and installation of protective cap.



**Mission Support Alliance**  
**Hanford Ten Year Site Plan**



**Role: Research and Report Development**  
**Period of Performance: Oct 07 to Present**

**Scope:**

- Develop and prepare exhaustive annual Real Property plan for DOE's Hanford Site
- Reconcile plans, budgets and baseline WBS elements with emphasis on footprint reduction, maintenance activities and infrastructure support
- Meet reporting requirements of Executive Orders 13327, 13423 and 13514 and, DOE Order 430.1b



**Maine Yankee Atomic Power Co.**  
**Maine Yankee Decommissioning Project**



**Role: Consulting**  
**Period of Performance: Feb 02 to Sept 05**

**Scope:**

- Provided professional consulting services in support of LTP and FSS activities for the MY decommissioning.
- Assisted MY in crafting the policy, regulatory, and technical content of the LTP.
- Technical lead for LTP information pertaining to characterization, final site survey, and dose modeling/risk assessment.



**Oak Tree Management**  
Waltham MA. Property Survey



**Role: Scoping Survey & Engineering**  
**Period of Performance: Aug 07 to Sept 07**

**Scope:**

- Performed radiological scoping survey of Radium contaminated property
- Survey design included background determination, structural surveys and soil sampling
- Developed report for submittal to MA DEP detailing survey findings, proposed remediation approach and unrestricted release criteria.



**DOW Chemical Company**  
TDCC Bay City Decommissioning



**Role: Consulting**  
**Period of Performance: Feb 02 to Sept 05**

**Scope:**

- Provided professional consulting services in support of LTP and FSS activities for the MY decommissioning
- Assisted MY in crafting the policy, regulatory, and technical content of the LTP
- Technical lead for LTP information pertaining to characterization, final site survey, and dose modeling/risk assessment.



**Shaw Venture**  
Group Various Exelon Facilities



**Role: Outage & Maintenance Support**  
**Period of Performance: Jan 05 to Sept 06**

**Scope:**

- Provide key personnel for management of field work during outages at Exelon Nuclear Plants, including Containment and Drywell Coordinator
- Assist with work control and planning during outage
- Provide management of special projects under the oversight of client management.



Stone & Webster, Inc.

Browns Ferry 1 Restart Project



Role: ALARA Engineering

Period of Performance: July 02 to Feb 07

**Scope:**

- Provided radiological engineering in the areas of ALARA and ALARA controls to Stone & Webster contingent during the refurbishment and restart of the Browns Ferry Unit 1 nuclear reactor
- BSI innovative and effective ALARA programs allowed Stone & Webster to meet and exceed their exposure goals for three straight years
- Deployed “GammaCam” survey & imaging system to identify hot-spots.



Waste Control Specialists

WCS Andrews, TX Facility



Role: Engineering & Consulting

Period of Performance: May 02 to June 04

**Scope:**

- Provided radiological engineering support at the direction of WCS in assisting with the development and implementation of radiological procedures and protocols supporting the operation of the Andrews, TX facility
- Services include technical basis development, reporting of environmental data, radiological assessment and field radiological control services.

## Business & Contact Information

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<b>Business Category:</b>	Small Business – Privately Held Corporation
<b>NAICS:</b>	562910
<b>DUNs Number:</b>	01-108-5680
<b>Tax ID:</b>	91-2025188



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