

WILLIAM F. ACTON, P.E.

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SENIOR MECHANICAL ENGINEER

Machinery & Equipment Design / Power Plant Equipment & Piping Mods / Technical Writing

Accomplished, results-oriented mechanical engineer with established track record of success as Lead Engineer for machinery and equipment design and installation projects in the nuclear industry; offering superior leadership, communication, and organizational skills backed by demonstrated talent for managing multiple projects simultaneously. Detailed oriented while able to maintain big-picture view of the direction and progress of projects. Licensed Professional Engineer (ME & CA).

Core Competencies:

- Mechanical Design
 - Developmental Testing
 - Technical Writing
 - Design Team Leadership
 - Project Planning & Management
 - 3D CAD: Inventor & SolidWorks
 - Calculations and Evaluations
 - Equipment Vendor Oversight
 - Material Selection / Evaluation
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PROFESSIONAL EXPERIENCE

ENERGYSOLUTIONS – CAMPBELL, CA

Mechanical Engineering Manager *April 2014 to Present*

- ◆ Supervises daily activities of junior engineers who perform a wide range of activities related to mechanical design.
- ◆ Initiates and develops mechanical equipment designs based on industry and government standards.
- ◆ Trains, develops and motivates junior engineers to improve their present performance and to prepare for higher-level jobs.
- ◆ Produces, reviews, and approves engineering documents such as drawings, calculations, and specifications as required.
- ◆ Manages fabrication projects of mechanical equipment by interacting with vendors and procurement staff.
- ◆ Responsible for managing budget and schedule for project

PASTEURIZATION TECHNOLOGY GROUP – SAN LEANDRO, CA

Director of Engineering *July 2013 to April 2014*

Provided technical leadership during project to design, procure, and install an innovative municipal water treatment system.

- ◆ Interfaced with equipment vendors and fabricators on efforts to design, build, install, and commission equipment skids for municipal waste water treatment plant.
- ◆ Interfaced with owner's engineer on project coordination.
- ◆ Responsible for managing budget and schedule for project.
- ◆ Implemented 3D CAD to facilitate equipment layout.

CONSULTANT FOR SIEMPELKAMP NUCLEAR SERVICES – WEST COLUMBIA, SC

Tooling Engineer *May 2013 to July 2013*

Provided technical guidance to client in an effort to improve tooling and process performance during The segmentation of the Humboldt Bay Nuclear Plant reactor internals and reactor vessel segmentation.

- ◆ On-site engineering support of equipment
- ◆ Troubleshooting segmentation process
- ◆ Tooling and equipment design

CRYSTAL RIVER 3 NUCLEAR PLANT (CR3) – Crystal River, FL

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Design / Project Engineer (2012 to 2013)

Provided oversight and acceptance of engineering change packages for facility modifications; managed, reviewed, and approve work performed by external design organizations (EDOs), engineering firms, and equipment vendors to ensure compliance with design standards and codes. Effectively managed critical projects, coordinating team activities across equipment specifications, design, fabrication, and engineering change. *Key accomplishment:*

- ◆ Oversaw the design of modifications to the following systems/components: new vertical raw seawater pumps (including piping configuration changes), raw water intake screen trash rake, lube oil filter system for turbine driven main feed pump, and ultrasonic flow measurement instrumentation for raw water system.

MONTICELLO NUCLEAR GENERATING PLANT (MNGP) – Monticello, MN

Project Engineer, Extended Power Up-Rate (2009 to 2011)

Directed work of EDOs; reviewed and approved drawings, equipment specifications, and test/work instructions to ensure fulfillment of codes and safety standards. Orchestrated repair of three pairs of Feedwater Heaters (FWHs) for Extended Power Up (EPU) project at 1775 MW nuclear power plant; Oversaw design of modification to Turbine Building structure to support heavier FWHs. *Key accomplishments:*

- ◆ Reviewed and accepted all demolition and construction drawings, equipment specifications, testing and work instructions against applicable codes: ASME VIII, ANSI B31.1, and AISC.
- ◆ Produced Engineering Change Notices (ECNs) when required as part of technical support in the field to ensure construction issues were resolved quickly, minimizing project delays.

GE-HITACHI NUCLEAR ENERGY AMERICAS – San Jose, CA

Lead Tooling Engineer, Reactor Services Engineering (2007 to 2009)

Coordinated efforts of tooling engineers, interfaced with project managers, and managed design, testing, and delivery of remotely operated tools (and mockups) for reactor internals modification projects. *Key projects:*

- ◆ Tokai Jet Pump Sensing Line: Managed installation of mitigating hardware, performed testing to establish torque range, and served as technical lead in Japan throughout first project phase.
- ◆ Nine Mile Point: Designed and tested Electro-Discharge Machining (EDM) actuator for underwater cutting of metallurgical samples from reactor hardware; utilized tools for safe transferring of samples.

GE-HITACHI NUCLEAR ENERGY AMERICAS – San Jose, CA

Senior Mechanical Engineer, Suction Strainer Group (2005 to 2007)

Spearheaded mechanical design of suction strainers and debris interceptors (DI) to prevent debris from entering emergency core cooling system of pressurized water reactors (PWR) and minimize impact on pump performance. Led teams to create concept, fabrication, and general arrangement layout drawings. Wrote design and installation specifications and O&M manuals. Provided technical support during DI installations. *Key accomplishment:*

- ◆ Championed effort to weld wire cloth to perforated plate, increasing composite strength of material while yielding lighter weight, less costly structure.

GE-HITACHI NUCLEAR ENERGY AMERICAS – San Jose, CA

Tooling Engineer, Reactor Services Engineering (Contract - PennPower) (2004 to 2005)

Performed design and testing activities for tools used to machine, measure, and repair reactor internals for various domestic and international boiling water reactors (BWR). *Key projects:*

- ◆ Onagawa 2 Tie Rod Installation Project: Oversaw measurement, underwater machining, and hardware installation phases; managed testing/procedure writing for jet pump installation and removal.
- ◆ Clinton Core Shroud Repair: Redesigned Shroud Head EDM tools, incorporating design / process improvements to facilitate easy installation; wrote test specification and managed tool testing.
- ◆ Invader Underwater Inspection System: Drove testing of remotely operated vehicle designed to inspect reactor internals; ensured adherence to test specifications and documented results.
- ◆ Nine Mile Point 1 Fuel Prep Machine: Coordinated design activities to upgrade channel handling tool for New York power plant.

CELLTECH POWER, INC. – Westborough, MA

Mechanical Engineer, Systems Group (2003 to 2004)

Supported activities for building prototype solid oxide fuel cell (SOFC) systems designed to run on natural gas. Redesigned systems and components in response to assembly and performance problems; machined stainless steel, welded high temperature alloys, cut insulation panels, and fabricated / assembled heat exchanger and plumbing system, fuel delivery system, and sheet metal enclosures. *Key accomplishments:*

- ◆ Developed new insulation cutting system, speeding progress and improving insulation panel quality.
- ◆ Built and tested apparatus to test new powdered insulation concept to replace insulation panels.
- ◆ Set up company-wide database for assigning systematic numbers to engineering drawings.

VISHAY SPRAGUE DIVISION, VISHAY INTERTECHNOLOGY, INC. – Sanford, Maine

Equipment Design Engineer (1999 to 2003)

Designed production line equipment for a multinational electronics manufacturer specializing in tantalum capacitor production. Supported advancement of projects designed to improve ergonomics, quality, and performance.

ADDITIONAL EXPERIENCE

R & D Design Engineer • VORTECHNICS, INC. – Scarborough, ME (2003)

Mechanical Engineer • BACK BAY CRAFTSMEN – Portland, ME (2001)

Tool Design Engineer / Manufacturing Engineer • PARKER HANNIFIN CORP. – Portland, ME (1993 to 1999)

High School Technical Teacher • UNITED STATES PEACE CORPS – Swaziland, Southern Africa (1990 to 1992)

EDUCATION, LICENSES, AND PROFICIENCIES

Bachelor of Science in Mechanical Engineering • ROCHESTER INSTITUTE OF TECHNOLOGY – Rochester, NY

Maine Licensed Professional Engineer, License Number 9993

California Licensed Professional Engineer, License Number M33813

Technical Proficiencies: SolidWorks, Autodesk Inventor, Mathcad V14.0, ATF Fathom 7.0, MS Office Suite