

# **WILLIAM B. THOMAS, PE**

## **Senior Engineer I**

### **PROFILE**

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Engineer with 37 years experience in material/design engineering, project management, power plant maintenance, quality assurance management and environmental oversight.

### **EDUCATION**

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M.S., Manufacturing Systems Engineering, University of Pittsburgh, 1999

B.S., Mechanical Engineering, University of Pittsburgh, 1974

Completed 47 undergraduate and graduate credits in business and education at St. Francis University and the Indiana University of Pennsylvania since 1983

### **CERTIFICATIONS/TRAININGS/AFFILIATIONS**

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Registered Professional Engineer in Pennsylvania since 1980

PA Teaching Certifications in Secondary Mathematics and Physics

Completed 40-hour EPA Water Quality Standards Academy as well as a 3-day extensive course on Environmental Statistics at University of Texas in mid 1990's

Attended several legal seminars on NPDES issues in late 1990's

Maintained ANSI N45.2.23 Lead Auditor Certification for over eight years

Completed a six-month Basic Welding course at Greater Johnstown Vo-Tech in 1980

Member of American Institute for Steel Construction

### **ASSOCIATIONS AND ACCOMPLISHMENTS**

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- As member of the Electric Power Generation Association (EPGA), served as chairperson of the Water Quality Subcommittee from 1998 to 2002. EPGA is a utility trade association that works on water related regulatory issues on the state level. This included working with the PaDEP officials regarding water resources legislation, laboratory certification, water quality effluent trading, anti-degradation, and coordinated and prepared comments related to a number recent changes to water related regulations.
- Served on the Utility Water Act Group (UWAG) Technical committee for Reliant. UWAG is a national utility trade association that deals with water related regulatory issues on the federal level.
- Played a major role in the development and writing of the Pennsylvania Electric Quality Assurance Manual, Quality Assurance Procedures, and Quality Assurance Specifications. The QA Specifications included Spec's on General Construction, Pressure Parts, Turbines, Fans and Electrical Equipment.
- Served as a member of a Penelec Focus Group that was tasked by Senior Management to evaluate and improve the Company's Generation Division Engineering Process.
- Delivered formal presentations on Environmental and Quality Program functions to Edison Electric Institute, Electric Power Research Institute, local public forums, and Company Officer & Directors Meetings.
- Presented a number of training courses to bargaining and supervisory personnel on various Quality Assurance requirements.
- Knowledgeable in concrete furnishing, delivery, placement and testing.

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- Experienced in pressure vessel and piping in-service inspection and related failure modes such as graphitization, creep, and brittle fracture.

## **AWARDS**

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Recipient of the year 2000 EPRI Environmental Sector Delivery & Applications Award

## **PUBLICATIONS**

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Author, "Fossil Utility QA Using the Service Concept", ASQC Energy Update newsletter, December 1990

Co-Author, "Look before you leap into extensive site investigation", Soil & Groundwater Cleanup, May 1997

## **PROFESSIONAL EXPERIENCE**

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### **Sr. Engineer (July 2005-Present)**

**Cambria Consultants, Inc., Johnstown, PA 15904**

- Mechanical and Civil Design/Material/Safety/Environmental Engineering

### **Sr. Engineer (August 2004-December 2005)**

**Empyrean Group**

- Part-time engineering and construction surveillance for Reliant Energy and the Cambria County Conservation & Recreation Authority

### **Substitute Teacher (August 2004-June 2009.)**

**Cambria and Somerset Counties**

- Substitute teacher in the Conemaugh Township, Ferndale, North Star, Richland and Somerset Area School Districts

### **Sr. Engineer – Environmental (1993-July 2004)**

**Reliant Energy** (formerly Pennsylvania Electric Co.) Environmental Safety & Health Department

- Responsible for the implementation of Pennsylvania Solid Waste, Water Quality, Dams & Waterways, and Remediation regulations. This includes permitting, operations support and record keeping. Duties also involve Groundwater Monitoring, related Quality Assurance programs, Groundwater Assessment & Abatement and general Compliance Auditing.
- Obtained numerous NPDES, Water Quality Management, Dams & Waterways, and Solid Waste Disposal permits, and negotiated Consent Orders with the PaDEP.
- Prepared and submitted comments on numerous proposed environmental regulations for Reliant Energy and its predecessors.
- Obtained permits for the Seward re-powering project, a 520mw power plant construction project in progress since 2001.

### **Senior Engineer II – Quality Assurance (1991-1993)**

**Pennsylvania Electric Company**

- Responsible for managing the companies Quality Program for several large generating stations and the construction of a Flue Gas Scrubber at the Conemaugh Station.
- Responsible for developing and tracking the department's one million-dollar plus Operation and Maintenance budget, as well as its related material and services procurement functions.
- Maintained the department Quality Assurance statistics & trending, and updated and controlled the departments Quality Assurance, Procedures, Specification and Receipt Inspection Guide manuals.

- Department Certified Lead Auditor responsible for Design Control audits of Architect-Engineers and general Vendor audits.
- Performed various Quality Assurance Engineering functions from my two previous positions.

#### **Quality Assurance Manager**

##### **Pennsylvania Electric Company (1985-1991)**

- Responsible for four Quality Assurance Engineers, a Clerk, three full-time Quality Control Inspectors, up to 12 part-time Quality Control Inspectors and a one million-dollar plus budget.
- Responsibilities also included coordinating Source Inspections and Audits using both Penelec and contracted resources, as well as performing various Quality Assurance Engineer functions from my previous position.

#### **Quality Assurance Engineer (Engineer II through Senior I) (1978-1985)**

##### **Pennsylvania Electric Company**

- Responsible for weld inspection, equipment inspection (boiler components, pressure vessels, pumps, fans and turbines), construction inspection, quality program audits, Specification & Bill of Material review/approval, and Quality Assurance program development.
- Wrote numerous quality program procedures and specifications, and wrote and qualified ASME welding procedures.

#### **Production Engineer (Level Jr. through I) (1974-1978)**

##### **Pennsylvania Electric Company**

- Responsible for thermal performance testing of boilers, turbines, and air heaters.
- Assisted in air emissions testing, performed preliminary design engineering for small power plant projects, and balanced small rotating equipment.

### **PARTIAL PROJECT EXPERIENCE**

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#### **Cambria Consultants Inc.**

- Shawville Unit #1 Precipitator Inlet Duct replacement design, including developing fabrication and construction drawings and specifications.
- Developed and implemented inspection of the Coal Handling facilities at Avon Lake, Portland and Shawville Station.
- Developed the PADEP permit package for the Shawville Drinking Water Potable Water System Upgrade.
- Designed OSHA compliant access platforms for Conemaugh & Seward stations.
- Designed OSHA compliant fall protection systems at Conemaugh & Seward stations.
- Design of ASME pressure vessel and piping components at Seward station.

#### **Pennsylvania Electric Company/Reliant Energy**

- Developed the Quality Assurance Quality Control program for the Conemaugh Generating Station FGDS Construction project. This included material and equipment source inspection and construction inspection.
- Managed the welding program, including developing and qualifying welding procedures and material failure analysis and prevention.
- Developed the Quality Assurance Program for the groundwater monitoring wells at the various generating facilities of Pennsylvania Electric Company. This included implementing a computer database system for groundwater chemistry data, in order to identify non-compliance with regulations, and long term trending.

- Was environmental lead on a project team to remediate the Seward Coal Refuse site, which became the foundation of the new Seward Generating Station. This included testing and evaluating remediation methods, and obtaining regulatory approvals.
- Was the environmental lead on the project team for constructing the new Seward Generating Station. This included obtaining all soil, water and waste permits.

**Cambria County Recreation Authority**

- Provided construction oversight for the installation of passive mine water treatment systems at the Rock Run Recreation Facility for the Cambria Country Recreation Authority.