



# HYDRO POWER SERVICES

MAINTENANCE, REHABILITATION & UPGRADES



**PEM**

Power Equipment Maintenance

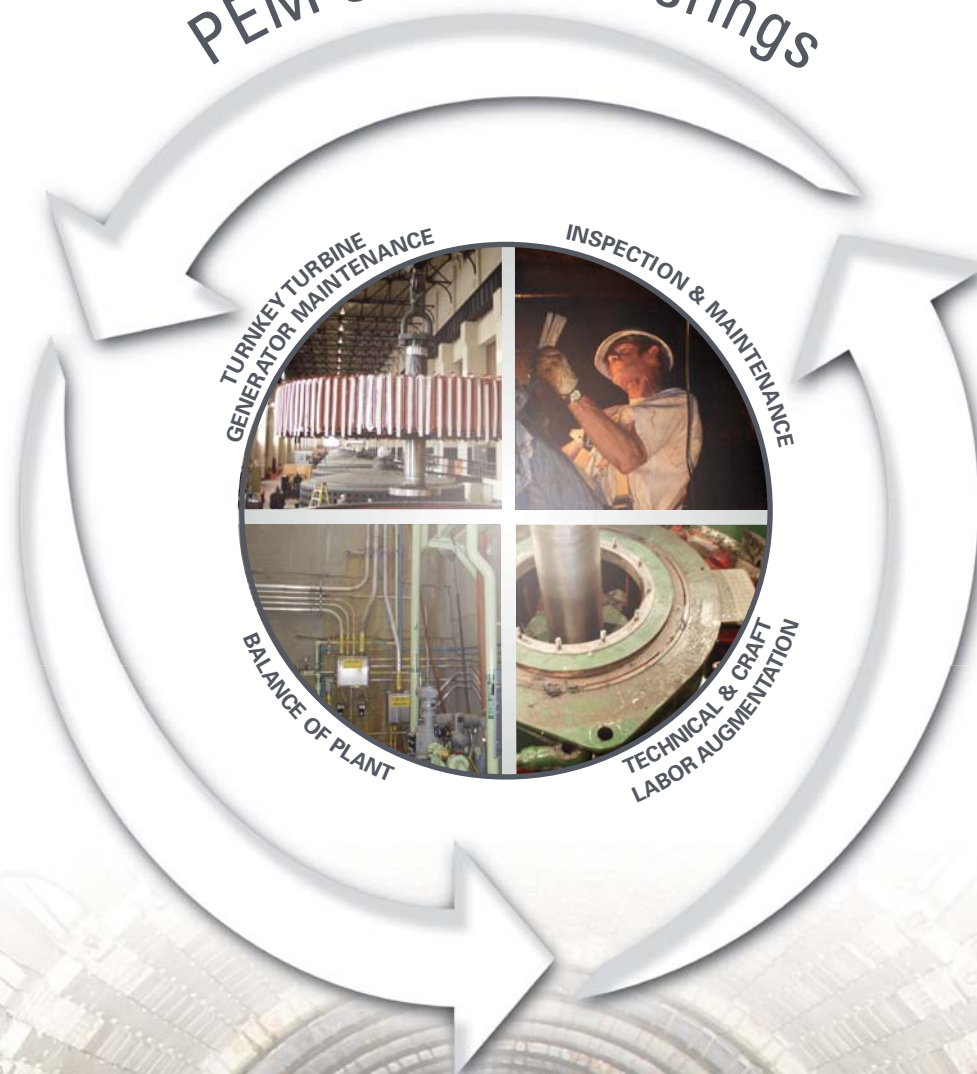
 A BHI Energy Company

# COMPANY OVERVIEW

Power Equipment Maintenance, Inc. (PEM) brings more than 14 years of experience providing specialty turbine services to the hydroelectric, nuclear, fossil and wind sectors of the power industry. As an independent service provider, PEM leverages this experience from all segments of the power generation industry to provide cost-effective solutions to utilities, equipment manufacturers, and independent power producers (IPPs).

- Leading provider of hydro turbine/generator turnkey outage services and technical labor augmentation to the power industry
- Resource of over 600 trained & skilled craft and technical personnel
- Uniquely positioned to address industry-wide craft concerns by providing trained & qualified personnel to support specialized hydro turbine projects nationwide
- Highly mobile workforce with the ability to respond to emergency service needs nationwide
- Experienced in hydro turbine maintenance, inspection, rehabilitation & upgrades
- Proven performance supporting hydro power generating equipment projects ranging from pumping units to large turbine/generators

## PEM Service Offerings

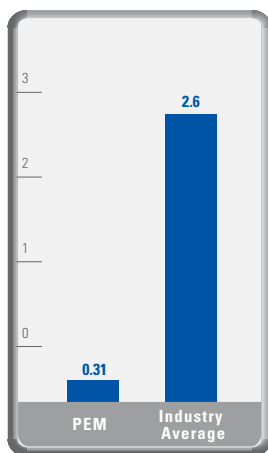


# SAFETY & QUALITY ASSURANCE

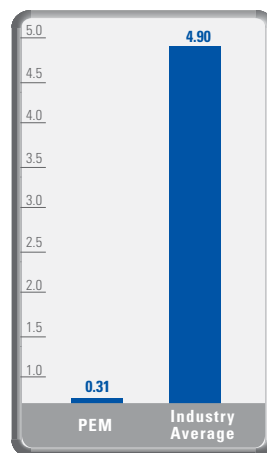
**SAFETY FIRST.** PEM's primary core value is the safety of our employees, customers and the communities in which we work. Safety is at the center of every job we perform and emphasized at all levels of the organization. We believe our exceptional safety performance facilitates customer loyalty and is one of the most important criteria by which customers select their service providers.

**PEM'S SAFETY RECORD CONSISTENTLY OUTPERFORMS INDUSTRY AVERAGES**  
and is a reflection of our attitudes, practices and overall commitment to safety.

**2009 DAYS AWAY-RESTRICTED  
TRANSFER CASE RATE (DART)**

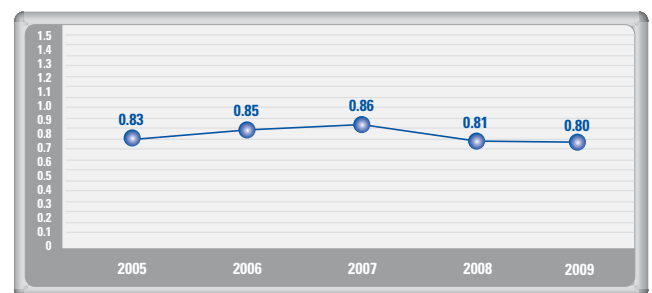


**2009 TOTAL OSHA RECORDABLE  
INCIDENT RATE (RIR)**



PEM's DART and RIR far exceed industry safety standards

**EXPERIENCE MODIFICATION RATE (EMR)**



PEM is operating under its historical best EMR

## TRAINING & QUALIFICATION PROGRAM

PEM's training and qualification program provides tangible benefits to our customers and employees. Our on-the-job training (OJT) is designed to augment the existing skill sets of both current and new technicians. PEM's OJT documentation is a key differentiator that provides a tool for tracking and advancing employee qualifications and matching skill sets for all projects.

### *Training & Qualification Program Client Benefits:*

- Pre-qualified technicians are immediately productive
- Cross-trained technicians increase flexibility, resulting in smaller work crews & reduced manpower expense
- Training programs strengthen the skill sets of our current employee base
- Training programs develop a pipeline of new technicians from other industries
- Project management certification program leads to more effective outage planning & execution
- OJT documentation ensures employee skills match or exceed assignment requirements

# TURNKEY TURBINE SERVICES

## INTEGRATED SERVICES

### Maintenance

### Repair

### Overhaul

### Inspections

- Overall Project Responsibility
- Planning & Work Scope Development
- Scheduling – SureTrak, P3, P6, & Microsoft Project
- Manpower Requirement Development
- Outage Budget Monitoring
- Subcontractor Oversight
- Schedule Adherence
- Quality
- Safety

### Project Support

- Pre-outage Planning
- Work Scope Development
- Staffing Levels
- Previous Outage Review
- Inspection Guideline & Data
- Safety Audits
- Define & Direct Craft Activities
- Problem Solving & Troubleshooting
- Run/Repair/Replace Recommendations
- Startup Support

## OVERVIEW

PEM's team of experienced, trained and knowledgeable professionals offers a comprehensive package of installation, rehabilitation, maintenance and upgrade services on a turnkey basis.

### *Typical turnkey services include:*

- Project Management
- Turbine Tooling Modules
- Technical Direction
- Rental Equipment
- Planning & Scheduling
- Consumables
- Qualified Craft Labor
- Component Repairs
- Subcontractor Management
- Startup Support

## Project Highlights

### KENTUCKY UTILITIES

#### *Dix Dam Hydro Station*

PEM provided turnkey project management, skilled craft, supervision, scheduling, subcontractor and vendor management for mechanical projects as well as turbine/generator unit rehabilitation outage services including needle valve/penstock modifications, turbine and hydraulic governor equipment inspections and repair services.

### PPL GENERATION LLC

#### *Holtwood & Kerr Dam Stations*

PEM provided turnkey hydro turbine outage services, unit inspections, maintenance and repairs, including outage scheduling, project management, technical support, subcontractor and vendor management, tooling, shop fabrication repair and comprehensive staffing for outage support.

### DUKE ENERGY

#### *Ninety Nine Island, Fishing Creek, Wylie Hydro & Bad Creek*

PEM provided mechanical services for unit upgrades and replacements including project management, supervision, skilled craft labor, subcontractor and vendor management, rigging and tooling for various sites.

### SOUTHERN COMPANY / GEORGIA POWER COMPANY

#### *Goat Rock Hydro Plant*

PEM provided turnkey mechanical installation services for the installation of two Andritz VA Tech Hydro axial bulb-type turbine/generator units. Services included project management and field labor services for the installation of new turbine/generators, balance of plant compressed air and hydraulic systems.



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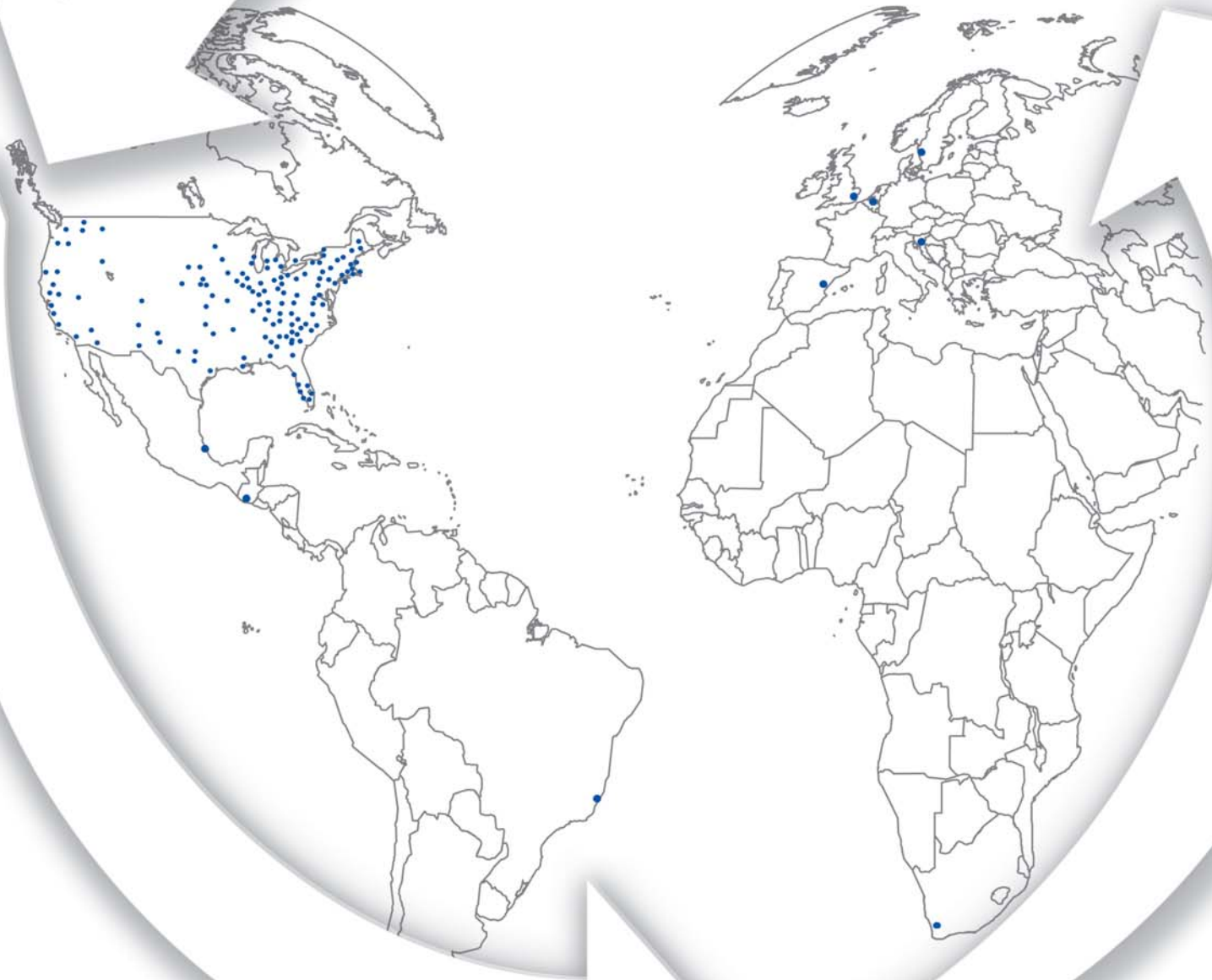
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## BHI ENERGY GLOBAL PROJECT LOCATIONS



**CONTACT:**

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[www.peminc.net](http://www.peminc.net)



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