



**Causey Engineering**  
LLC

**Gerald J. Hietpas, PE**

**President**

## **Curriculum Vitae**

***STEVEN R. RYZNER, BSEE, MBA***



*Mr. Ryzner is an Associate of Causey Engineering, LLC. Causey Engineering has for over 25 years been providing forensic and investigative engineering services and litigation support, specializing in industrial and construction engineering, operations, safety, patents, and regulations. Mr. Ryzner is an electrical engineer with particular experience in the field of steel and building material manufacturing, utilities, power generation, facilities, maintenance, process automation, and tool/die functions.*

### ***Education:***

**University of Illinois at Urbana-Champaign, IL**  
BS Electrical Engineering, 1983

**J.J. Kellogg Graduate School of Management, Northwestern University, IL**  
MBA – Marketing & Operations, 1988

**Bethlehem Steel Corp., IN**  
Corporate Management Development Program

**Looper Program**  
Power Systems; Motors & Generators

**Instructor for Deming / Ford Motor Company Quality Training Program**  
Statistical Process Control (SPC), Six sigma DMAIC process, Design of Experiments (DOE), Gauge repeatability and reproducibility (GR&R)

### ***Certifications:***

Certified Power Engineer, State of Indiana

### ***Significant Achievements:***

Retained by National Science Foundation to mentor emerging companies in alternative energy and new technology products

**Causey Engineering LLC**

*"Forensic and Investigative Services"*

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**Austin, TX 78734**

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## ***Technical Experience Summary:***

- Electrical and mechanical maintenance on large rotating equipment up to the largest class in industry: AC motors, DC motors, DC generators, synchronous motors, pumps, fans, gearboxes, compressors, turbines, turbine generator sets, motor-generator sets, and other rotating and reciprocating equipment.
- Maintain, troubleshoot, and repair industrial electrical systems, including the largest found in manufacturing and utility plants including fuse breaker coordination studies, grounding testing, power factor correction, as well as noise and harmonic distortion analysis.
- Engineering, installation, commissioning, and maintenance of AC & DC drives, variable frequency drives, programmable logic controllers (PLC), distributed control systems (DCS), motor starters, load-centers, switchgear, circuit breakers, uninterruptible power supplies (UPS) and Operator Interface Terminals (OIT / HMI).
- AC and DC switchgear up to 13,800 volts.
- Manufacturing electrical safety policy, including arc-flash requirements.
- Electrical and mechanical work on industrial AC & DC cranes, up to the largest class ratings in industry.
- SCADA system design and installation: hardware and software, hard-wired and wireless.
- Smart Grid
- Computer room grounding testing
- Thermographic (infrared) surveys
- Preventive maintenance program development and management, including computerized maintenance management systems (CMMS).
- Predictive maintenance program development and management, including vibration analysis of rotating equipment, ultrasonic detection, and tribology (lubricant analysis).
- Laser alignment craftsman training and implementation.

## ***Work Experience:***

**CAUSEY ENGINEERING LLC**, Austin, TX

2009 – present

*Forensic Expert:* Provide Forensic and investigative work related to manufacturing, particularly of steel and building materials, electrical, energy generation, distribution, control and usage. Causey Engineering provides engineering analysis, governmental regulation investigation and research, accident reconstruction and litigation support primarily related to steel, building materials, oil and gas, refineries, chemical and petrochem plants, central power stations, electronic manufacturing, food processing, pulp and paper, lumber manufacturing, industrial construction, and warehousing.

**SAGIN, LLC** Chicago, Illinois

2007 – present

*Consultant:*

- Perform technical and project management services for infrastructure and alternative energy projects.
- Provide merger and acquisition due diligence for private equity, including business model, strategy, and financial analysis.
- Mentor emerging companies by assisting them with their strategy, financing, and commercialization plans.

**JAMES HARDIE BUILDING PRODUCTS** Peru, Illinois

2005 – 2007

*Project Manager – Northern & Eastern US Regions:*

- Directed successful efforts to analytically reduce cash costs through hybrid technical / financial of manufacturing processes, supply chain, and energy systems.
- Managed capital improvement projects from conception through design, funding, engineering, construction, start-up and manufacturing.
- Integrated regional efforts to shift asset management strategy, change business process model, and implement new Enterprise Resource Planning (ERP) and Computerized Maintenance Management System (CMMS) systems to reduce inventory and improve uptime.

**COREY STEEL CORPORATION** Cicero, Illinois

2004 – 2005

*Director of Engineering and Maintenance:*

Managed engineering, facilities, maintenance, and tool / die functions for large production facility.

- Developed a team to identify and correct deficiencies in infrastructure and technical support systems. Introduced external benchmarks to drive continuous improvement in internal and external performance measures to decrease unscheduled downtime on key production lines
- Overhauled the engineering and maintenance organization and initiated culture change. Results were improved skill level, performance, and attitude of staff through increased training, expectations, and accountability.

**BETHLEHEM STEEL CORPORATION** Burns Harbor, Indiana

1984 – 2003

*Production Planning Manager, 2002 – 2003:*

- Led corporate executive project to audit, document, and optimize business processes, to improved margins, cash flow, and product consolidation.
- Directed and executed improved capacity planning, supply chain, logistics, manufacturing planning and scheduling (ERP) and operations throughput during Chapter 11 bankruptcy protection.

*Business Unit Manager, 1999 – 2001:*

Managed large diverse technical staff in one of the largest manufacturing plants in the country, including Information Technology (IT), computer hardware & software, and process instrumentation services.

- Re-engineered business processes and aligned IT infrastructure across 6000 employee division to support successful ISO 14000 certification efforts.
- Challenged staff to perform IT due diligence given Chapter 11 severe cash constraints and still provide 100% uptime to bottleneck areas in a profitable facility.

*Power Generation Engineering Manager, 1995 – 1999:*

Directed engineering staff in multi-fuel co-generation (alternative energy) station that provided electrical power, steam, and air generation for one of the largest plants in the country.

- Changed 30 year old risk-averse culture over into teams that assumed full "in house" responsibility for rebuild of large turbine generator with no disruption to plant's operations.
- Drove analysis and decision making framework to align technology decisions with realities of manufacturing strategy and business model.
- Headed cross-functional task force and solved complex engineering and operations quality problem.

*Project Engineer, 1988 – 1995:*

Engineered and managed wide variety of projects using latest technology to upgrade production controls and increase reliability.

- Led team efforts to consistently produce “best in industry” operations / maintenance business process performance as benchmarked by external auditors.
- Launched and expanded use of predictive maintenance tools including vibration analysis and tribology, resulting in lower repair costs and production delays.
- Managed multi-million dollar capital improvement projects.

*Planning / Maintenance Engineer, 1984 – 1988:*

Supervised crews of maintenance craftsmen in repair of production and service equipment.

- Coordinated and directed implementation of first enterprise computerized maintenance system (CMMS).
- Initiated and constructed plant’s first thermography (infrared video) program. Program was expanded plant wide.
- Recruited into corporate management development program that produced every CEO in corporation’s history.

***Professional Memberships:***

**NAPE** - National Association of Power Engineers:

**TMA** - Turnaround Management Association

***Presentations, Publications:***

Power System Analysis: James Hardie Building Products

*Use of this CV is prohibited until we have a mutually signed agreement concerning your engagement of Causey Engineering LLC. Pending such, the use of our name is also prohibited, and we reserve the right to accept assignment by others in lieu of your firm.*