

# Hemendra Jani

## Principal Electrical Consultant - Process safety management - DuPont Corporate Engineering

Plymouth Meeting, PA - Email me on Indeed: [indeed.com/r/Hemendra-Jani/d56e3ae819e51dfb](https://indeed.com/r/Hemendra-Jani/d56e3ae819e51dfb)

- Self-directed certified six sigma professional, Project engineer/manager with over 30 years experience in electrical industry electrical products & power projects from proposal to commissioning in US and overseas.
- Excellent communication and interpersonal skills with ability to interact with multiple organizations.
- Capable of making immediate contribution & energizing engineering services unit of a power company, independent power producers, industrial plants, corporate facilities engineering, AE/consulting engineering or electrical equipment manufacturing companies.

### WORK EXPERIENCE

#### Principal Electrical Consultant - Process safety management

DuPont Corporate Engineering - Wilmington, DE - January 2011 to Present

Implement MIQA best practices to assure PSM requirements are met for electrical power equipment. Develop programs to analyze and improve the Electrical Power distribution equipment reliability supporting manufacturing plants.

- DuPont North America M & R process review for compliance with DuPont and other industry standards. Develop, communicate and audit M & R Systems for power equipment for North American sites. Identify gaps in a site's work practices and help define the business value improvements.
- Develop strategies, program proposals, improvement programs and control plans to close the gaps and deliver business improvement and help the site implement.
- Obtain program funding as required to support developed programs.
- Perform technical consulting in various offerings such as root cause failure analysis, reliability centered maintenance, uptime/UPbase, and system preventative maintenance.
- Interacts with other consultants, plant and business personnel, suppliers, and contractors to accomplish business improvements.
- Perform & document equipment criticality analysis.
- Analyze data (failure, cost, Uptime, etc) using appropriate reliability analysis tools to develop & implement improvement plans.
- Lead electrical-power reliability improvement teams
- Perform or arrange for physical failure analysis
- Teach physical failure analysis & evidence preservation techniques.

- Work with plant engineering, purchasing and plant's stores organizations to develop & execute appropriate Quality Assurance (QA) practices.

- Assess effectiveness of QA practices

- Work with plant's inspector group to ensure appropriate inspection technologies are being used and assessing quality of inspection plans.

- Review inspection reports and analyze data to determine fitness for service, quality of inspection, appropriate inspection interval, etc.

### **Adjunct Professor of Electrical Engineering**

Drexel University Goodwin College - Philadelphia, PA - January 2007 to Present

Teaching: Energy Conversion, Electrical Network Analysis, Electrical System design and Power Electronics courses to Senior level undergraduate students.

### **Senior Electrical Special - Major Capital Projects**

Sunoco Refining and Chemicals - Marcus Hook, PA - September 2007 to January 2011

Electrical lead for Capital projects (exceeding \$15MM) team for refinery capacity and new process additions.

- Liaison with Power company and DPSC for utility regulation implications for new service to alternative fuel (Ethanol) manufacturing facility.

- Utility tie main electrical substations for large compressor motors and process loads in Class 1 Div II area for process upgrades for Low Sulfur Diesel , Diesel hydro cracker/treater etc. Work with OSHA and DEP for process safety compliance audits.

- Project scope, estimates, schedules, engineering consultants' coordination, field assessment, and support for installation, testing and startup.

(Contact Patrick Givey, Engineering Manager - 610-859-1934)

### **Lead Project Engineer**

Shaw - Stone and Webster Engineering - Cherry Hill, NJ - September 2006 to September 2007

PSEG Power Fossil Power plant Mercury Emission control system addition.

- Electrical Power distribution Design & Specifications of Electrical switchgear, relaying, UPS-Battery system for DCS and plant critical loads. Applying FERC regulation for substation relaying.

(Contact: Supervisor's Name: Gerry Huffman, 856-482-4095)

### **Engineer Manager**

General Electric Capital Mod - Wayne, PA - May 2005 to August 2006

Modular building specifications, construction support, vendor development & management, maintaining and updating modular building specifications, cost model database for commercial, educational, healthcare industry & value engineering program leader in compliance with applicable building - structural, plumbing, HVAC, Electrical, energy conservation, HCA-ADA for all 50 states and local municipal codes.

- Monitoring State/Industry code revisions, legislative requirements and other technical issues affecting the fleet. Assisted legal and insurance in understanding code issues as they pertain to any technical interpretation of incidents.

(Supervisor: Tom Breen - Chief Engineer Asset Intelligence)

### **Senior Electrical Project Engineer-Manager**

PSEG Power - Newark, NJ - April 2003 to May 2005

Power plant modernization & life extension retrofit projects including replacement of GE-ALTEREX excitation regulator with EX2100 digital excitation system replacement of 50 year old 5KV switchgear with new vacuum switchgear with digital relay & metering systems. Temporary Power planning for outage.

- Prepare project schedules, budget estimates, construction specifications Interface with procurement, testing and construction department planning, procurement field inspection supervision & start up.
  - Performed Condition assessment study for all in plant switchgear installation and prepared report for repair v/s replace analysis.
  - Performed market survey and detail study on power system computer modeling analysis software tools.
- (Contact Supervisor: Clint Bogan, Supervisor's Phone: 973-430-7024)

### **Director - Business Unit Manager - Power Protection and Control**

Areva T & D - Bethlehem, PA - November 2001 to November 2002

Business unit manager for \$10MM North American operation of \$300MM - World leading business unit of Digital Power system Protection control & automation systems Lead staff of 19 professionals including Project managers, Engineers, manufacturing and quality assurance organizations.

- Ensured customer satisfaction by project completion and improved financial performance of the business by collecting record \$9MM over dues in less than 5 months.
- Outsourced manufacturing to improve business financial performance. Established new vendors for fabrication, assembly and wiring of relay panels.
- Drafted Quality process manual & EHS policy manual.

### **Senior Engineering Team Leader**

General Electric Company - Power Systems - Philadelphia, PA - July 1981 to November 2001

Product standards & Requisitions Project design engineering - Led an engineering team for \$40MM Modular Power building & substation business to meet IBC, NEC-NFPA, ANSI, IEEE & NEMA standards, Managed project assignments, scheduling & tracking in direct support of materials procurement, production, QC, Customer shipment requirements.

- Designed and specified switchgear (600-34.5KV), static generator excitation system (EX2100 & Brushless), diesel, motor & static start systems (LCI), turbine generator controls (MK V/VI), protective relaying (Digital), metering, auxiliary motor controls, power distribution, station battery systems & SCADA for complete line of GE combined cycle power generating plants Frame 5, 6, 7E/F & 9E/F as well as aero-derivatives LM and substations (to 230KV).

Physical layout of equipment, conduit and cable routing, specifications of transformers, circuit breakers, relays, grounding.

Created & maintained knowledge based engineering procedures database for engineering efficiency One line & Schematic diagrams, product configuration control, Product design parameters Weight/CG, HVAC-Fan unit sizing, Equipment sizing Power distribution MCC/ Panel boards, cable, conduit sizing, relay settings calculations. Improved performance of Requisition engineering group by 55%.

Developed effective work plans to prepare proposals by integrating product team including coordination with structural & HVAC systems design coordination with consultants, vendors & contractors.

Managed Customer coordination for product application and estimates for new and in process design change orders - cost & schedule impact.

Training & development: Managed GE technical leadership development program as assignment leader and Drexel University coop program for 7 years to foster the interest of young engineers in the field of electrical Power engineering.

Field Engineering Support: Coordinated construction & installation support programs and created a feedback system tracking ECN/DCN (engineering/Design change notices) for continuous product quality improvement. Achieved 80% reduction in customer complaints.

Value engineering: Successfully led Cost-out programs exceeding \$1.0 MM in material and labor productivity and OTR order to remittance cycle reduction through product & process reengineering "work-out" sessions with vendors, contractors and customers.

Six sigma quality programs: Certified Greenbelt, GE corporate program applying advanced statistical analysis for identification and resolution of design and production problems.

Designed, specified, and coordinated protective relay logic, PLC-control, Power metering & instrumentation systems for generating station, transmission and distribution substations for Utility and industrial facilities worldwide.

- Conducted training sessions, startup and field-testing assistance in China, India & Korea.  
(Contact Subhash Patel, Supervisor's Phone: 610-337-6861)

### **Senior Electrical Engineer**

Bechtel Power Corp/PRC Envirodyne - Chicago, IL - May 1977 to June 1981

Power plant & Waste water treatment plants, Hospitals, Airports, street, highways & toll roads lighting & electrification. Designed low (600V) and medium (34.5 KV) voltage power distribution systems. Fire alarm & communications systems. Standby generation, computer rooms, laboratories, clean rooms, Process, lighting, HVAC load analysis & building energy management systems. Plant & facilities inspection for banks & financial institutions for maintenance records, code compliance etc.

Led 10 member team for preparation of proposals/estimates, technical reports, one line & schematic diagrams, plant layouts, systems calculations for short circuits, voltage drop, equipment specifications, shop drawing review and field acceptance inspection per ANSI, NEC, NEMA, IEEE and UL standards. Secured major engineering services contracts and completed on time, below budget resulting in fast promotions.

(Contact Supervisor's Name: Robert Fischer, 312-938-0300)

### **R & D Engineer**

ABB Power - June 1976 to April 1977

Trained intensively to study design, manufacturing, testing of various utility, industrial & traction Power & control products of ABB. Solid state DC motor controls.

## **EDUCATION**

### **MSEE**

Indian Institute of Technology - New Delhi, Delhi  
June 1976

### **BSEE**

SP University - Gujarat, IN  
June 1974