

BACKGROUND SUMMARY

Over twenty five years of experience in both design and construction, with positions held in management (design and engineering), marketing and construction administration and supervision.

EXPERIENCE

6/2001 – Present Gemma Power Systems, LLC, Glastonbury, CT
Senior Vice President, Engineering, Procurement, Commissioning

As part of the executive management team responsibilities include managing client relationships, evaluating new project opportunities, determining allocation of resources, prioritizing work activities and new hires, with a strong focus on the engineering, procurement and commissioning activities of the company.

- **Engineering** – responsibilities include:
 - Select engineering firm for each project
 - Negotiate and execute of the engineering subcontract
 - Review of all EPC proposals to ensure alignment with technical requirements and responsible for evaluating the performance requirements and associated risk
 - Assign in house engineering team and project engineering manager to the project
 - Manage and oversee performance testing
 - Oversee in house engineering staff
 - Monitor the project engineering deliverables and insure schedule is met
 - Review overall project design and insure performance guarantees are met
 - Manage all changes to engineering subcontract.
 - Oversee field engineering activities
 - Manage and accountable for all document control procedures and execution
 - Maintain relationships with engineering firms from a business development perspective
 - Assist in the estimating and proposal preparation

- **Procurement** - responsibilities include:
 - Set the procurement budgets for projects
 - Establish procurement procedures
 - Oversee procurement staff
 - Negotiate major equipment purchases
 - Approve all equipment purchases along with bulk material orders and selected subcontracts
 - Negotiate all major change orders to purchase orders and subcontracts
 - Approve all payment to suppliers and subcontractors
 - Ensure that all equipment meets performance requirements delivery schedule and budget
 - Oversee the Director of Procurement's day to day responsibilities

- **Commissioning** – responsibilities include:
 - Set commissioning budget
 - Oversee commissioning staff
 - Assign appropriate staff to individual projects
 - Oversee Director of Commissioning's day to day activities

- Review commissioning procedures
- Negotiate commissioning subcontracts such as electrical testing, chemical cleaning etc.
- Ensure commissioning schedule is met while maintaining a safe environment and protection of equipment

- **Key Project Experience:**
 - Colusa Generating Station - 640MW combined cycle facility with duct burning capability. The facility is classified as Zero Liquid Discharge, including a water treatment system and air-cooled condenser for cooling water. Gemma's EPC scope of work includes complete plant design and construction from site development through substation and electrical interconnection. Final completion is scheduled for autumn of 2010.
 - RBF Port Neches Biodiesel Project - facility capable of producing 180 million gallons per year of biodiesel. The process design is based upon a continuous process that pre-treats feed stocks to allow maximum production flexibility. Gemma's scope includes supporting the process design, detail engineering, procurement, construction and startup of all systems. The project mobilized on site in July of 2007 and reached substantial completion in December of 2008 for the first train, and March of 2009 for the second train.
 - GEF Houston Biodiesel Project - facility capable of producing 80 million gallons per year of biodiesel. The process design is based upon a batch-continuous production using refined soybean oil with possible free fatty acids up to 4% and palm oil. Gemma's scope includes supporting the process design, detail engineering, procurement, construction and startup of all systems. The project mobilized on site in October of 2006 and achieved substantial completion for two trains of operation in October of 2007.
 - The Roseville Energy Park - 160 MW combined-cycle power generating facility based upon an SWPC power island consisting of two Siemens Westinghouse SGT-800 turbines, duct-fired, two pressure non-reheat HRSG's and a non-reheat axial exhaust steam turbine. The project also includes a Zero Liquid Discharge system for processing of plant wastewater as well as generation of demineralized water. Gemma's EPC scope of work includes complete plant design, equipment procurement, construction and start-up/commissioning responsibility. Construction began in August 2005 with Substantial Completion achieved in October 2007.
 - The Galena Park - facility has the capability of producing 30 million gallons of biodiesel annually from either high-grade soybean oil or yellow grease. The biodiesel plant consists of a batch sequence up front and a continuous distillation process on the back end. The continuous process yields 90% return on the methanol and water used in the batch process at the same time recovering glycerin formed during the production of biodiesel. Gemma's scope of work includes plant design, equipment procurement, complete construction and operator training. This facility was completed in early 2006.
 - The Hines Power Block II - a combined cycle plant based upon an SWPC power island consisting of two Siemens Westinghouse 501-F combustion turbines, Vogt-NEM HRSG's, and a Siemens steam turbine generator. Gemma's EPC scope of

work included complete plant design and construction from site development through substation and electrical interconnection. Construction began in February 2002 and commercial operation was achieved in December 2003.

- Penuelas, Puerto Rico –Successfully developed the fee proposal for an international client of alternate power with a construction value of \$500 million. The project involved the design of a co-generation facility with a desalinization and liquid natural gas plant.
- Corinth Energy Center, Corinth, New York – 126 MW cogeneration facility, a dual fuel GE Frame 7EA combustion turbine with DLN combustion. The HRSG was supplied by Nooter-Eriksen and supplied 380 KPPH of HP steam at 1450 psi and 983 degrees F and 61,000 pph of LP steam at 155 psi and 455 degrees F. The steam turbine was a GE 50 MW machine with auto admission and extraction capabilities. The plant delivered between 40-100 kpph of steam at 140 psi, 400 degrees F to the International Paper Company. The project had a construction value of \$75 Million. Project exceeded performance goals and met budget and schedule.
- Ryegate Power Station, Ryegate, VT – 21.5 MW wood-fired power plant utilizing a Riley Stoker boiler with a hydrograte. The boiler produced 190,000 lb/hr of steam at 1250 psi and 955 degrees F. The steam was supplied to a GE steam turbine with four extractions, each supplying a feedwater heater. The fuel-handling system consisted of belt scales, truck scales, hogger, two truck dumpers, two storage silos and wood conveyors. The ash system supported a re-injection system. The pollution control system consisted of ammonia injection and an electrostatic precipitator. The project was highly successful and met all schedules and budget parameters and received a performance bonus of approximately 13% of the contract value.

EDUCATION/REGISTRATION

- B.A. Fairfield University 1982
- B.S.M.E. University of Connecticut 1983
- Licensed Professional Engineer, State of Connecticut #15535
- ASHRAE President 1993