



David McAfee

President - Capitol Technologies Group

Education

Undergraduate studies in Physics and Electrical Engineering: University of Houston, Houston Community College, and University of Arkansas at Little Rock.

Bachelors of Science in Applied Physics, Trinity College

Communications and Security Systems: United States Marine Corps

Employment / Experience

2004 -2011 Capitol Technologies Group, Austin, Texas - President

2008 - 2011 Project Management of various Substation, Power Plants and Airport Projects in Texas and Surrounding Area Including:

LCRA Buchanan Dam Hydro Electric Facility 138KV, 38MW

LCRA Mansfield Dam Hydro Electric Facility 138KV, 54MW

UN Navy Corpus Christy Naval Air Station 138KV

Texas State College High Voltage System Expansion Engineering and Testing 227KV, 32MW

2006 - 2007 Antigua International Airport – Electrical Project Manager for a complete \$43M airport rebuild project. New High Voltage Airport Lighting System. New High Voltage Substation and Generator Plants. New Electrical Distribution System.

2006 - 2009 Nokia Mexico – Project Manager for a complete \$ 4.2M Design Build Project to rework 230KV Substation and all high voltage systems for Nokia's Mexico Fabrication Facility

2005 -2006 United States Postal Service, International Mail Inspection Facility, Miami Florida. Electrical Project Manager for the Construction of the USPS's new 180 million dollar International Mail Inspection Facility in Miami Florida. Project included a 138KV Substation and 22KV 39MW generation facility.

1998 – 2005 Power Quality Engineering, Austin, Texas - Vice President

Project Engineer and Manager – LaVallee Development Project St. Kitts, West Indies.

I designed and managed the installation of a ground up 2.7MW diesel generating station and development distribution system on the remote end of a Caribbean Island. This was a challenging project due to the remote location and absence of any heavy equipment port or handling equipment. I completed the year long 4 million dollar project on schedule and budget.

Project Manager – Austin Energy's New Sand Hills Energy Facility. Responsible for all field testing and start-up commissioning of a new 500MW Natural Gas/Steam Electrical Generation Plant. I was brought in to recover for a previous project management companies failed attempts to complete the project and start-up the plant. Developed, coordinated and executed detailed system by system test and commissioning plan. I completed the 240 million dollar plant and systems startup within limits of demanding project schedule. Project Included a 345KV Substation which had to be designed to integrate with the new Texas Command Center (largest in the USA and World) and on on-line un-interruptible base load plant.

Project Manager/Consultant – Motorola. Austin, Texas

I was assigned to Motorola's Engineering Department as a Consultant and Project Manager for four years managing a wide array of projects and tasks including: Y2K Computer and PLC System Upgrades, VOC Abatement System, New Central Chiller Plants, New Generation and Electrical Systems, Chemical Distribution Systems, Gas Monitoring and Distribution Systems.

Project Manager/Consultant – Dupont Photomasks. Austin, Texas

I was retained as the Owner's Engineering Representative for the Electrical and Controls Systems for their Advanced Retical Technology and Production Facility. Completed many projects between 1997 and 2002 including doubling the size and redundancy of the electrical service and distribution system (Project Costs \$570,000) and conversion of the existing Johnson Controls Control System to a GE Fanuc PLC / GE Cimplicity SCADA system (Project Costs \$225,000).

1997 General Electric, Austin, Texas - Project Manager

Project Engineer/Manager for the control system of Samsung's new 1.3 billion dollar semiconductor manufacturing plant in Austin, Texas. Completed a new 15 million dollar 4000 point Honeywell TDC 3000 based control system and a 6 million dollar 3000 point Allen Bradley PLC based Life Safety System. Project included 138KV double-ended fully redundant substation. Completed project in record time. This plant became the model for the City of Austin's Life Safety System Code Compliance.

1995 - 1996 Industrial Design Corporation, Austin, Texas - Project Manager

Project Manager/Consultant Phillips Semi-Conductor San Antonio, Texas

Perform all aspects of Engineering and Construction Management of the controls and electrical systems for Philips' state of the art semiconductor facility. Major accomplishments include tripling the size of the existing Allen Bradley GE Cimplicity control system to 4000+ points. Designed controls systems for many systems including; RODI water, Chilled Water System, Process Cooling Water, Air Handling Systems, Waste Treatment Systems, Exhaust Systems VOC abatement systems, Bulk and Spec gas storage and distribution systems and various waste treatment systems.

1982 – 1995 Bechtel Power Corporation, Houston, Texas - Electrical Engineer / Project Manager

Entergy Operations Arkansas Nuclear One Atomic Power Plant – (Working for Bechtel Power Corp) Little Rock, Arkansas 1990 – 1995

Field Engineer responsible for many major design projects including: 756KV 2200MW, Substation, Control Room Design, and Security System Design. Design Responsibilities included: AC and DC distribution systems, Diesel Generator Systems, UPS Systems, NEC Article 500 Design, PLC and DCS System Design, Communications and Data Systems, HVAC and Building Management Systems, Security Systems, and Fire Protection Systems. Projects were my responsibility from initial specification, through design and construction.

Houston Power and Light – South Texas Nuclear Project (Working for Bechtel Power Corp.),

Engineer / Designer for construction of the South Texas Nuclear Power Plant in Bay City, Texas. This is the largest 2 unit Nuclear Power Plant in the world and utilizes the 2 largest electrical generators ever made at 1480 Megawatts. 745KV Substation with 6 of the largest step-up power transformers ever made. Responsible for the electrical instrumentation and controls systems design various systems including: Protective Relaying, Incore Instrumentation, Feedwater, and MainSteam systems. Also worked on Auxiliary systems such as Security Systems, Radio Communication System, and Fire Protection Systems. Performed miscellaneous design activities on the 22KV and 745 KV generation systems including hand calculations for load studies and Short Circuit Analysis prior to the availability of computer systems to perform these tasks. Received 16 hours a month of training on Power Plant Systems and Operations through-out a 10 year assignment to this project.