

ANTHONY L. CRUTCH

SKILLS AND ABILITIES Mechanical Engineer with 15 years of diversified experience working in the utilities industry. Skilled in Wind and Solar Utility Scale Project Development, Combined Cycle Plant Piping and Process Design Engineering, Construction Management, Startup and Commissioning, and Operations and Maintenance of Combined Cycle and Renewable Energy Power Plants

PROFESSIONAL EXPERIENCE **[PROJECT DEVELOPER-US WEST & CANADA, ENGIE NORTH AMERICA]**

[1/2022-Present]

Actively Leading early, mid, and late-stage Wind and Solar Development and Permitting activities- PJM, WECC, and SPP markets; supporting efforts in Commercial Strategy, Green-fielding new sites, Land Acquisition, Pre Construction, and Power Marketing.

[PROJECT DEVELOPMENT ASSOCIATE SR, SOUTHERN POWER (SPC), SPC PROJECT DEVELOPMENT]

[12/2018 - 1/2022]

Renewable Project Developer with Southern Company's wholesale subsidiary Southern Power Company IPP of 11.9GW of operating assets.

Actively leading cross functional teams in developing Pro forma cost models used for the Acquisition and Development of Wind Projects. Experienced negotiating Equipment and Service Contracts with Major Suppliers and leading Development and Permitting activities

[SOLAR AND WIND OPERATIONS ENGINEER SR, SOUTHERN POWER (SPC), SPC RENEWABLES SUPPORT]

[5/2016 - 12/2019]

Asset Manager for over 1GW of Oklahoma and Texas Wind Farms in the SPP and ERCOT markets. Asset Manager for the Southern Power West Coast Solar Fleet in the CAISO market

Experienced in setting up a Renewable Operations and Maintenance Program, providing technical support for the renewable fleet and managing forced and maintenance outage events.

[SYSTEM OWNER, MISSISSIPPI POWER-KEMPER IGCC, MAINTENANCE & PLANNING]

[5/2014 - 5/2016]

Combined Cycle Engineer over a 582MW 2x1 Combined Cycle. Experienced day to day operations and maintenance activities related to Boilers, Gas Turbines, Steam Turbines, Generators, High Energy Piping, Boiler Feed pumps, and supporting BOP systems.

Daily activities involved working with Planners, Mechanics, and Electricians in resolving Condition Related issues with equipment and piping systems. Gained experience in troubleshooting equipment, implementing MOC's, working with Operations, developing the maintenance strategy, contract management, and Forced & Maintenance outage management.

[DESIGN FIELD ENGINEER, SOUTHERN COMPANY SERVICES, DESIGN, CONSTRUCTION, STARTUP, & OPERATIONS-KEMPER COUNTY IGCC ENERGY FACILITY]

[10/2012 - 5/2014]

Mechanical Design point of contact on site at Kemper County for Construction, Startup, and Operations. While serving in this role, gained experience in working in resolving design field issues, working with the State of Mississippi in certifying Pressure Vessels on site, coordinating with vendors for proper installation of equipment, and providing technical support to Startup and Construction for the checkout of equipment.

While on site, worked as an Assistant Startup Coordinator for the Balance of Plant group. Gained experience in commissioning pumps, compressors, control valves, flushing and cleaning piping systems, coordinating work for Startup Craft labor, performing system walk downs, developing punch lists, creating turn over packages, and writing commissioning procedures.

[PIPING SYSTEM DESIGN ENGINEER, SOUTHERN COMPANY SERVICES, MECHANICAL DESIGN]

[5/2007 - 10/2012]

Completed Rev.0 Plant Piping design for Kemper County IGCC BOP and Cryogenic systems. Developed P&ID's, procured main components, and worked with designers on pipe routing.

During the design phase of the Kemper County IGCC Project, traveled to Houston Regularly to meet with KELLOGG Brown & Root (KBR) Project Management and Engineers to resolve concerns between SCS Mechanical and KBR related to Scope, Procurement, PID's, and Isometrics. Hosted a weekly conference call with KBR and SCS to team up counterparts in between visits to Houston.

EDUCATION [UNIVERSITY OF ALABAMA HUNTSVILLE—HUNTSVILLE, AL—BS MECHANICAL ENGINEERING (DECEMBER 2009)]