

# Al Carpenter

**TEXAS, USA**  
2208 Belaire Dr.  
Granite Shoals, TX 78654  
[www.alcarpenter.com](http://www.alcarpenter.com)

(941) 786-7034 (USA)  
[alcarpenterjr@hotmail.com](mailto:alcarpenterjr@hotmail.com)  
[al@alcarpenter.com](mailto:al@alcarpenter.com)

**Oil & Energy | Pharmaceutical | ISO 9 Clean Rooms | Battery Cells  
Manufacturer (electric vehicles) | New Construction | Planned/Forced |  
Outage/Shutdown Support | Owner/Client Representative | Systems  
Turnover | Completions | Pre-Commissioning | Start-Up | Handover**

Personal Web-Site: [www.ALcarpenter.com](http://www.ALcarpenter.com)  
Skype.com ID: [alcarpenter](https://www.skype.com/user/alcarpenter)

## Positions best suited for:

- Completion/Handover/Turnover, Manager
- Commissioning Manager
- Rotating Equipment, Manager
- Owner's Representative
- Quality Control Inspector (Site/Factory Acceptance)

## Skill Sets / Specialties:

Diversified background Power Plants New Construction, Naval Ship Building, Pharmaceutical Plants, Battery Cell Manufacturing, Inventor, Robotics, Material Handling Installation, Equipment Installation/Movement. Skilled and creative tool, fixture & gauge designer for machining applications as well as electronic & electro-mechanical assembly applications. Successful in combining communication, leadership and mentoring skills in training and education programs with proven record of increasing company awareness and involvement with key audiences. Skilled in the development of ensuring resources (money, time, people) are utilized to maximum benefit while balancing the functional areas of communications and overall (end result) quality. Effective communicator accomplished with process development, documentation & improvement.

## Equipment "Hands-On" Experience: (*Industrial Construction / ISO 9 Clean-Rooms*)

FGD Projects (Scrubber Flue Gas Desulphurization) New Installations, Turbines, Generators, ID Fans, Pumps – Outages / Shutdowns, Planned / Forced, - Start-Up, Commissioning, Systems Turnover, Exceptions, Punch-list, Troubleshoot (elect. / mech.), Heavy Industrial Conveyors / Crane Systems, Material Handling and Storage Equipment, Monorails / Tube Systems / Dock Lifts, Design / Assemble Robotic Equipment, Design / Repair / Electronic Sub-assemblies.

## Systems Turnover / Start-Up Commissioning / Handover:

Selecting and organizing teams of commissioning personnel to perform fast-track pre-commission/startup coupled with completions turnover. Pre-Commission-ISO 9 Positive Pressure Cleanrooms, review pre-commissioning procedures and method statements, modified where needed. To achieve project alignment Construction and Pre-Commissioning team required open dialog between departments for Startup activities. This process, accomplished by establishing and recognizing all counter parts in all directions, then coordination from each group to the startup team. Daily reports distributed each day by the pre-commissioning team to both groups. Once achieved, project becomes aligned. Sub-system turnover sequence is formulated and put into place. Experience in implementing, coordinating, planning, and developing work methods for teams to achieve smooth transition of completed systems, from core group of multi-discipline staff directing craft for pre-commissioning activities. Analyzing methods of work scope/structure and implementing changes to achieve reduction of startup duration and smooth handover to the client.

**Gresham Smith / October 2022 – May2024 (1 yr. 8 Months)****Commissioning Manager - (Greshamsmith Representative)****Ultium2 Cells GM Battery Plant Manufacturing – Spring Hill, TN.**

Ultium2 Cells Night Sky Project, Springhill, TN (GM Battery Plant) this is a new facility for manufacturing battery cells used in electric cars and other electric vehicles. Specializing in the development of raw materials into pouch cells, suited for automotive applications. Scope; oversee the 2.8m sq. ft. building envelope including all the building components, signoff for the exterior walls, roof, windows, and doors. Establish communication of testing points, witness/performance of the building envelope coupled by several sub-systems related to utilities heating, cooling, chillers, water towers, ventilating equipment, plumbing and electrical systems including sub-stations/switch gear. Responsible for control sequencing of multiple pcs (approx. 2,220) of equipment for predesigned areas throughout building (ISO 9001 standards/managed spaces) HVAC designs. In addition, streamline the commissioning platform CxAlloy plus, provide project leadership for scope identification and procedure development for turnover and pre-commissioning. Primary contractor interface for critical issues associated with commissioning system turnovers. Reviewed/Managed EPC's Start-Up file systems and monitored construction data (components/equip.)

**Gresham Smith / August 2021– September 2022 (1 yr. 3 Months)****Commissioning Manager - (Greshamsmith Representative)****Ultium1 Cells GM Battery Plant Manufacturing – Lordstown, OH.**

Ultium1 Cells project, Lordstown, OH (GM Battery Plant) this is a new facility for manufacturing battery cells used in electric cars and other electric vehicles. Specializing in the development of raw materials into pouch cells, which are ideally suited to automotive applications. The goal, increase battery performance while lowering cost to help facilitate the global transition to electric vehicles, all with safety as their top priority. Responsible for streamlining the commissioning platform CxAlloy plus, provide project leadership for scope identification and procedure development for turnover and pre-commissioning. Review project specifications and manufacturer installation procedures, review contractors plan to establish communication of witness and testing points, monitor quality documentation, checks and procedures, assist contractor with technical guidance including auditing of stored materials and equipment for adherence for established procedures and assist with owner equipment training.

**Jacobs Engineering / November 2019 – March 2021 (1 yr. 5 Months)****Commissioning Manager/Project Turnover- (Jacobs Engineering Representative)****Merck Pharmaceutical Manufacturing Plant Expansion - Elkton VA.**

This project venture is to expand Merck's manufacturing operation in Elkton, VA. Jacobs is the prime Engineering firm to build / designing 120,000 square feet structure to its existing 1.1 million-square-foot operations in Rockingham County to increase production of its Human Papillomavirus (HPV) vaccines. This project will consist of 194 systems required for Client/Owner Handover. Facilitate meetings and monitor vendor representative's work, charges, and documentation daily. Performed construction process assessments during system walk-downs and identify exceptions and deficiencies. Provide commissioning and testing of individual components, systems, and stations as a complete integrated unit to meet all contractual obligations. Performed specific functions for Start Up. Review project specifications and manufacturer installation procedures. Review/Sign-off contractors ITP plans to establish communication of witness and testing points. Track daily progress of assigned systems and provided a weekly report of such progress and activities. Monitor quality documentation, checks and procedures, assist contractor with technical guidance. Provide technical data and assist contractor with corrective measures addressing potential unforeseen problems and minor/daily issues.

**Florida Power & Light Company / April 2018 – October 2019 (1yr. 7 Months)****Sr. Contract Coordinator - (Owner's Representative)****1) West Count Energy Center, Loxahatchee, FL.****2) Fort Myers Plant, Fort Myers, FL.****3) Manatee Plant, Parrish, FL**

HRSR upper and lower penetrations/replacement (oversee sub-contractors/acquire and maintain system clearances), CT Overhaul/upgrade (oversee sub-contractors/acquire and maintain system clearances) M501G CT-HGP-TI-Gen Minor, CT enclosure removal, upper turbine casing removal, disassemble and inspect combustor components, inspect turbine blades vanes, and seals, inspect compressor IGV's blades and diaphragms plus, transition igniter upgrades. Change out boiler tube bundles and economizer repairs. CT Overhaul/upgrade (oversee sub-contractors/acquire and maintain system clearances)

M501G CT-Turbine Casing insulation upgrade (oversee sub-contractors/acquire and maintain system clearances) review procedures, arrange for revision if significant errors are found. M501G Gen Minor, CT enclosure removal, upper turbine casing removal, disassemble and inspect combustor components, inspect turbine blades vanes, and seals, inspect compressor IGV's blades and diaphragms. Develop a list of clearances for all assigned contractor tasks and submit complete clearance request. Obtain each clearance, measure/evaluate how other work impact work areas.

Attend each pre-outage outage meeting, complete understanding purchase order and proposals for all site and shop contractors. Review lump sum and time and material/consumables contract terms. Perform random headcounts for T&M contracts. Ensure times sheets are received by the cost scheduler in a timely manner, keeping the cost scheduler in the know. Reach out to sub-contractors and coordinate

their mobilization date. Review contractor confined space program prior to mobilization. Contact shop contractors provide notification when to expect components.

### **Energy Project Recourses, Inc. (EPR) / January 2018 – March 2018 (3 Months)**

#### **Construction Management Consultant/Systems Turnover - (OPGC II, Owner's Representative)** **IB THERMAL POWER STATION 2 x 660 MW Super-Critical Units 3 & 4 along with other common facilities** **Jharsuguda, Orissa - India**

For this Project I will oversee System Turnover Packages from two primary EPC (Contractors) and Construction Management Team (CMT, Owner side) for the issuance of either Erection Completion Certificate (ECC) or Mechanical Completion Certificate (MCC). Once the EPC submits an Request for Inspection (RFI) for the ECC, the turnover package will undergo a turnover package review process as noted within the approved contract.

After resolution of all the category "A" punch items are validated as cleared/closed the EPC will submit a Turnover notice request. If, Acceptable sub-system/system progress to the issuance of the (ECC). This turnover notice contains all documents as per appendix H (Clause 2.6) of service contract. This is to ensure complete resolution of all items in the turnover package and captured punch items. The ECC is now ready to proceed through to the Safety Rule Clearance Certificate (SRCC) process. Meaning; the sub-system is read to commence with pre-commissioning activities. After validating the completion /consolidation of all the sub-systems required for the issuance of the ECC the next step is for the EPC is to proceed forward requesting the issuance of a (MCC).

The Turnover Manager is owner of Master Punch list Register and will co-ordinate with the following groups; EPC, CMT, O&M and OPGC II Commissioning Team for resolution of all punch list items. After resolution of all punch-items for the consolidated ECC's making up a complete system the MCC will be issued. Oversee EPC contractor completion punch lists and ensure timely completion of all outstanding work and turnover documentation. , Review, system punch lists, and provide an auditable trail to ensure that all punch list items are captured, cleared and signed off for completion., Review agreed lists of system exception items to be completed by agreed dates, and to monitor and record completion of such exception items., Ensure that all the corrective actions to close the punch list were performed., Complete and maintain the client master systems matrix for Initial Acceptance., Communicate to EPC for client ensuring each system turnover is fully accepted by signature(s).

Once the MCC is issued the system is now ready for commissioning and capability testing as it meets the criteria noted in the approved contract. Final steps... Substantial Completion followed with Performance Testing.

### **Ethos Energy / June 2017 – December 2017 (7 Months)**

#### **System Turnover Support Specialist - (Ethos, Owner's Representative)** **New Construction, Carroll County Energy, 700MW Combined Cycle Plant Facility - Carrollton, Ohio**

As the System Turnover Support Specialist, duties included but... limited to surveillance monitoring and coordination of EPC compilation of all completions documentation system package deliverables from Mechanical Completion, Ready for Start-Up to Initial Acceptance.

Review client turnover packages for completeness, Motor Control Center (panel inspection), Electrical Equipment Lists (cable listing) Megger reports (provided/correct), Torque Values (vendor-specified torque value/code validation) instrument loop dossiers, relief valves, spring supports, electrical circuits, equipment packages etc., Attend all client turnover meetings and EPC Startup / Client system walk downs., Communicate with various Departments on the handover documentation to achieve the mechanical completion date.

Coordinate Project System Owner Completion for all discipline (Civil, Structural, Arch, Electrical, Instrumentation, HVAC, Piping, Fire Protection and Mechanical),. Follow the site approved turnover process and procedure for permanent plant systems per the contract., Establish good relationships with EPC/client by showing the reliability of database and cohesiveness of system handover.

Oversee EPC contractor completion punch lists and ensure timely completion of all outstanding work and turnover documentation. , Review, system punch lists, and provide an auditable trail to ensure that all punch list items are captured, cleared and signed off for completion., Review agreed lists of system exception items to be completed by agreed dates, and to monitor and record completion of such exception items., Ensure that all the corrective actions to close the punch list were performed., Complete and maintain the client master systems matrix for Initial Acceptance., Communicate to EPC for client ensuring each system turnover is fully accepted by signature(s).

### **Mitsubishi Hitachi Power Systems Americas, Inc. / June 2016 – June 2017 (1yr.)**

#### **Technical Support Engineer III - (Contractor)** **Standard Operating Procedure Writer, QA/QC MHPSA**

Support construction and commissioning activities of CCGT projects. As required, coordinate activities with Engineering, Technical Field Advisors in the field, Vendors and Contractors at site. Gather approved required documents and information to support the completion of relevant construction activities/requirements. Coordinate internally with other execution disciplines and observe and ensure construction practices as required for compliance of construction operations/execution with federal, state, and local codes, industry standards, company procedures, and contractual requirements.

Create action plans for the standardization / harmonization of best practices in MHPS with the implementation of the standards, guidelines, and SOPs utilized consistently for all projects. Provide determinations regarding standardization of specific process or practice for MHPSA and assist the project with implementation. Prepare and review method of procedures, commissioning plans, technical reports, specifications, and in-house/field studies. Implement project management best practices through work plans, critical path analysis, and earned value

milestones while utilizing the LEAN methodology. Review all aspects of assigned complex projects that support improvements to operations in MHPSA Lake Mary.

## **Indianapolis Power & Light, Harding Street / IPL / August 2015 – December 2015 (4 Months)**

### **Contract Administrator - (IPL Owner's Representative)**

#### **Planned Outage Fall 2015 – Full O/M**

**MAJOR EQUIPMENT:** Outage Scope: Full O/M, Full Boiler Wash Internal/External, High Energy Piping (HEP)-FAC/NDE-Inspections, Boiler Inspection/Repairs, Ductwork Inspection/Repairs, Water Box Flushing Configuration, Condenser/Water Box man-safe Isolation Valves, Deaerator Level Controls, Cooling Tower Fan Deck, Piping MT, Valve MT, Expansion Joints MT, Insulation Replacement for HEP Inspections.

Outage Contract Administrator, responsible for documenting updating pertinent completed activities as well as abnormalities found plus, implementing daily activities streamlining the sub-contractor process from start to finish. Administer and supervise sub-contractor(s) daily/hourly activities required to achieve and maintain contractual compliance. Provide management level information during all phases of the outage process, timeline coordination among multiple sub-contractors. Overall, client/owner liaison for sub-contractor questions, scheduling and support ensuring contract milestones are being achieved as scheduled.

## **Methanex G1&G2 Relocation Project / Jacobs Engineering / February 2014 – July 2015 (1yr. 6 Months)**

### **Completions Turnover Manager - (Jacobs Engineering Representative)**

#### **Relocation Project - Installation of two methanol plants from its Chile site to Geismar, Louisiana**

**MAJOR EQUIPMENT:** Burners, Cooling Tower, Desuperheater, Eductor, Exchangers, Flare Stack, Reactor, Reformer, Refractory, SCR, Silencers, Tanks, Vessels.

The first plant, Geismar I, is expected to be operational by the end of 2014. The second plant, Geismar II, is expected to be operational by early 2015. The plants will each be capable of producing 1.1 million tons of methanol a year.

Turnover team details to follow; (project, scope/phase G1&G2, manpower, path-forward...)

## **55K Metcalf Expansion Project / Jacobs Engineering / August 2013 – February 2014 (7 Months)**

### **Pre-Commissioning Manager - (Jacobs Engineering Representative)**

#### **New Modernization / 1.4B Project – Free Port-McMoRan Copper and Gold Mine – Morenci, Arizona**

**MAJOR EQUIPMENT:** Complex includes 50,000 mtd concentrator producing copper and molybdenum concentrates, 68,000 mtd crushed-ore leach pad and stacking system; a low-grade run-of-mine leaching system; four solution extract (SX) plants; and three electrowinning (EW) tank houses producing copper cathode.

Responsible for selecting and organizing a team of 14+ commissioning personnel to perform to a fast-track pre-commission and completions turnover of crushed-ore leach pad and stacking system, a low-grade run-of-mine leaching systems, four solution extract (SX) plants and three electro winning (EW) tank houses producing copper cathode for Free-Port-McMo Ran Company. It was necessary to drive and plan the completion process from day one to achieve the targets set by the client. Completions team reviewed all pre-commissioning procedures and method statements, modified where needed, to effectively meet first copper alignment of sub-systems. In order to achieve project alignment Pre-Commissioning and Construction required open dialog between both departments. This process was accomplished by establishing all counter parts in both directions, then coordination from both groups to the client. Daily reports were distributed each day by the pre-commissioning team to both of these groups. Once achieved the project became aligned/first copper sub-system turnover sequence was formulated and put into place. Coordination of punch list completion and handover of system documents from each contractor on a weekly basis, sometimes daily. Responsible for implementing, coordinating, planning and developing work methods for the team to achieve smooth transition of completed systems, from 14+ core group of multi-discipline staff directing craft for pre-commissioning activities. Analyzing methods of work scope/structure and implementing changes to achieve reduction of completions duration and smooth handover to the FMI/client commission group.

## **BP Project / Jacobs Engineering / August 2012 – August 2013 (1yr. 1 Month)**

### **Turnover / Commissioning Manager - (Jacobs Engineering Representative)**

#### **Modernization Project 6.4B – BP Whiting Refinery – Whiting, Indiana**

**MAJOR EQUIPMENT:** (two) 1625 GPM Amine Stripping Units, (two) 1100 GPM Sour Water Stripping Units, (two) 575 LTD Sulfur Recovery Units, (two) 610 LTD Tail Gas Units, Distributed Control System, Emergency Shutdown System, Power Distribution Centre

This project was split into two phases, NorthEnd & SouthEnd. Overall the project consisted of 570 sub-systems required for Client/Owner Handover. Upon my arrival to this project (Aug2012) 165 systems had been turned over during a 10month stretch. Being fully accountable and responsible for all System Turnovers it was evident at the time, in order for turnover to be successful the current process would have to be restructured. The path forward, put into place, was to formulate a collaboration of construction and turnover personnel to work closely with project controls to ensure schedules remain reasonable and to help identify any changes that would impact turnover. An alignment between construction, turnover and commissioning was put into place and managed by turnover. Daily construction turnover meetings were driven by turnover, providing pre-populated completion data worksheets in line with project control Mechanical Completion (MC1) system turnover dates. Having aligned both departments the next step was to manage punchlist items captured during Client/Final Walkdowns. Turnover provided the construction group a structured daily hand-out denoting "Priority Items". Sub-system punchlist priority items associated with systems ready for pre-commissioning activities that allowed a smooth transition for Client Handover (SH1). A performance evaluation conducted 10 months later denoted 279 systems had turned over. The turnover restructuring provided a net increase of 114 systems over the same time frame.



**Trans-Global Energy Ltd. / April 2011 – June 2012 (1yr. 2 Months)**

### **Startup / Commissioning Systems Turnover - (GE Representative)**

#### **New Construction CCGT – 2000MW Power Plant Facility – Sabiya Power Station – Subiya, Kuwait**

**MAJOR EQUIPMENT:** 6-GE Frame PG9351FA (9FA) dual fuel Combustion Turbines, (2 per power block) 3-GE D11, Reheat Steam Turbine-Generators each equipped with a bottom terminals 50Hz 324 hydrogen cooled generator.

Project consisted of (6) GE 9FA Dual Fuel Turbines, (3) GE D11 Steam Turbines and (3) HRSG's, producing 53 primary systems and 713 sub-systems of those 231 were centerline power block. My direct involvement during "phase one" was to review the systems turnover packages for the Power Block portion, monitor the EPC construction progress for all disciplines by verifying work progress against turnover documentation and system turnover schedule, leveraging others as needed by discipline. Phase two - project required streamlining the overall process of systems turnover from EPC Construction/Pre-Commissioning, Power Block Commissioning to Client/Owner Handover. Subsequently this required to independently develop and improve the current Systems Completions processes in order to successfully achieve project milestones. Develop and manage OM Handover Walk-Downs, schedule and support team planning based on turnover from startup. Interfaced with the operating organizations, to determine specific requirements regarding preparation/acceptance for Final Handover and guided multi-disciplinary team "Core-Group" of 20+ members for the execution of Commercial Operation Systems Turnover. The successful completion/turnover was contributed to ensuring that all Joint Ventured and Client Representatives were notified for all turnover activities well in advance.

**Shanahan Engineering / October 2010 – January 2011 (1 yr. 3 Months)**

### **Startup / Commissioning Systems Turnover - (GE Representative)**

#### **New Construction STAG 9FA 800MW Single Shaft Combined Cycle Power Plant - Surgut, Russia**

**MAJOR EQUIPMENT:** 2 - GE Frame 9FA's, 2 D11 Steam Turbines and 2 CMI – EPTI, (HRSG)

Developed/created processes to better streamline the over-all system turnovers. The procedures developed were very basic in nature thus, allowing for better adherence to the new process. The new process involved construction and commissioning disciplines to personally engage themselves in reviewing their respective portions of each sub-system requiring their signature as being mechanically complete, denoted in a turnover log. Weekly reports were submitted to GE Project Manager, Site Manager, and Commissioning Manager. Items tracked in these reports identified project required systems, accepted, rejected, under review, staged (up-coming based on system priority), system breakout - Unit #'s, Client Owned, Common, and so forth. Coordinate with GE and Gama regarding to the Turnover package for its Content. Monitor completion status for system(s) and Sub-system(s) based on pre-commissioning/Commissioning schedule. Tracked and reviewed all Turn-Over Packages for Mechanical Completion sign-off for accuracy and completeness of documentation for turnover to the client from \* plus contractors. Direct Representative between the Client (OGK-4), GE and Gama (EPC).

**ProEnergy / March 2010 – August 2010 (6 Months)**

### **Start-Up / Commissioning Systems Turnover - (EPC Representative)**

#### **New Construction 250 MW Aero-Derivative Power Plant - La Raisia, Venezuela**

**MAJOR EQUIPMENT:** Pratt & Whitney FT8 Swift Twin Pac's & GE LM6000

Interface with Construction, Start-up and Commissioning Groups. Provide assistance on contractual aspects to the construction group for preparation of short term schedules in support of successful completion and turnover of the systems to the Commissioning and Start-up Group. Provide direction for the construction group ensuring proper documentation is captured for each system turnover package. Additional Duties were to kick off the LOTO program, which resulted in my personally spearheading the program until we achieve provisional acceptance to the owner. The LOTO program is consistent with Industry standards such as; Verify safety tags and locks are in place on system boundaries before signing off the turnover package. Track the completion of all outstanding punch list items, adopting a "done-done" philosophy. Organize and maintained system turnover packages tracked turnover performance and reviewed the results with the Construction Manager and the Start-Up Manager. Routinely provide assistance required to support startup efforts ensuring compliance with the associated specifications, resulting in an efficient and timely system turnover to the client.

**TVA / July 2009 – February 2010 (1yr.)**

### **Rotating Equipment Lead / Systems Turnover - (Owner's Representative)**

#### **New Construction 582 MW Combine Cycle Power Plant – Brownsville, TN**

**MAJOR EQUIPMENT:** Mitsubishi 501F Gas Turbines, GE-D-11 Steam Turbine, Nooter/Eriksen HRSG, GE Generator

Provide single point contact ensuring that construction requirements were made known to the Construction Manager. Act as a liaison to EPC Contractor Construction Activities and other members of the TVA Project Team plus, provide Document Control with as built information. Review of project specifications and manufacturer installation procedures. Review contractors ITP plan to establish communication of witness and testing points. Monitor quality documentation, checks and procedures, assist contractor with technical guidance. Ensure that the location and manner of installation of all newly installed rotating equipment items are satisfactory and in accordance with requirements and recommendations provided by vendors, maintain reports for all. Provide technical data and assist contractor with corrective measures addressing potential unforeseen problems and minor/daily issues. Perform final walk downs of completed rotating equipment installations for compliance to site specifications and drawings. Respond to the needs of the Project Team in accordance to TVA's Standards and Specifications in relation to Systems Turnover Packages with the Washington Group Contractor coupled with commissioning activities and Start-up procedures. Performed system walk downs required for mechanical completion. Track the categorization completion of all exception items. Participate in site meetings with contractor and TVA project team members, and report as required on the updated status of up-coming system turnovers.

**Progress Energy / October 2008 – July 2009 (1yr.)****Systems Turnover / Rotating Equipment Lead - (Owner's Representative)****New Construction FGD – 1.5B Wet Scrubber Flue Gas Desulphurization Project – Crystal River, FL****MAJOR EQUIPMENT:** Howden Buffalo L3N Size 3786 DWDI – ID-Fans

Track progress of assigned systems and provided Startup Manager with a weekly report of such progress and activities. Coordinate and monitor vendor representative's work, charges, and documentation on a daily basis. Performed construction process assessments during system walk-downs and identify exceptions and deficiencies. Assist in commissioning and testing of individual components, systems, and stations as a complete integrated unit to meet all contractual obligations. Performed specific functions normally performed by the Start Up Manager when designated by the Start Up Manager. Perform all other duties as assigned by the Startup Manager. Interface with the G&TC Project Team on critical issues associated with system turnovers. Guide EPCR and Burns & McDonnell through the Progress Energy's G&TC Turnover Process. Facilitate exception categorization with the G&TC Project Team. Ensure that all Turnover and Quality documents are captured and processed in accordance with Progress Energy's Turnover Process. Liaise with Document Control Field office to ensure that standards are adhered to as well as maintained.

**Pro-Energy Services — July 2008 – September 2008 (3 Months)****Start-Up / Commissioning Systems Turnover - (Representative for Worley Parsons)****New Construction \$118M Central Heating Plant Project – Hadley, MA****MAJOR EQUIPMENT:** MFG: Caterpillar - Solar Mars 100 Gas Turbine Generator Set kWe 10,695

Provide Start-up/Commissioning Support / Turnover Package Management. Validate existing/new systems and provide support in-order to maintain const. to comm. turnover documentation integrity. Phase 1) Restructured/design turnover packages by implementing industry standard format; STP's, Revamped SOP's contents with the aid and support of the Commissioning Manager, Operator Supervisors and I&C Technicians to name a few. Phase 2) Developed a strong interface with the EPC which allowed the opportunity to track down and identified all responsible parties (sub-contractors) as to where the original construction documentation where housed. Reviewed/Managed EPC's Start-Up file system and monitored construction data (components/equip.) for Turnover Acceptability. This process required daily verbal/electronic communications between, sub-contractors, EPC, owner reps. and plant operators. Provide the client with an enhanced turnover package infrastructure to meet their regulatory requirements for the facility turnover process.

**Progress Energy — January 2007 – May 2008 (1yr.)****Mechanical Lead / Commissioning Support, Systems Exceptions - (Owner's Representative)****New Construction FGD – 870M Wet Scrubber Flue Gas Desulphurization Project – Roxboro, NC****MAJOR EQUIPMENT:** Flaktwood AF-6310A – ID-Fans 1,111,000 ACFM, Flaktwood 2490 DYW Booster Fans 621,000 ACFM

Oversee the following: (but not limited to) reviewing of project specifications and manufacturer installation procedures, review contractors ITP plan to establish communication of witness and testing points, monitor quality documentation, checks and procedures, assist contractor with technical guidance including auditing of stored materials and equipment for adherence to proper short/long-term storage and maintenance procedures. Ensure that the location and manner of installation of all newly installed rotating equipment items are satisfactory and in accordance with requirements and recommendations provided by vendors. Maintain reports for all. Provide technical data and assist contractor with corrective measures addressing potential unforeseen problems and minor/daily issues. Perform final walk downs of completed rotating equipment installations for compliance to site specifications and drawings. Track/Monitor all Systems Turned-Over to Commissioning Dept. / Punch-list / Exceptions. Participate in meetings relative to sub contracts, site quality problems, and schedules as required by Site management as well as coordinating as needed on technical issues with the PCD Project Lead Mechanical Engineering.

**PIC-Energy Group — January 2005 – November 2006 (1 yr.)****Project Manager****Planned/Forced Turbine Outages – Major/Minor Inspections - USA**

Mr. Carpenter reports directly to the Turbine Services Manager assisting in matters related to Field Services; his primary responsibilities; coordinates, performs, and oversee the activities of selected FSD Projects. Provides recommendations on a broad spectrum of FSD related issues; coordinates with in-house and field project assigned personnel, provides detailed project instructions to ensure that projects will be completed on time as well as improve the actual process used during each project to minimize project costs.

**PIC-Energy Group — July 2003 – January 2005 (2 yrs.)****Operations Manager****Field Service Operations / Corporate In-House – Atlanta (Marietta), GA**

Mr. Carpenter reports directly to the Sr. VP Field Services. Assists the Director in any matters related to the operations of Field Services; his primary responsibilities; develop policies and procedures for Field Services Operations, plans, coordinates, performs, and oversee the activities of all field service projects. Provides recommendations on a broad spectrum of division related issues; coordinates with in-house and field project assigned personnel, provides detailed project instructions and assistance as necessary; develops, performs and manages the implementation of PIC-World Operations Platform to track field services projects. He interfaces with the Business Development Manager, and Finance Manager to minimize project costs.

**Progress Energy — March 2001 – June 2003 (2 yrs.)****Site Mechanical Engineer - (Owner's Representative)****New Construction Combine Cycle Power Plant – Rincon (Savannah) GA****MAJOR EQUIPMENT:** GE 7FA Gas Turbines, Nooter/Eriksen HRSG

Oversee New Turbine Installations and Inspections for owner. Monitor activities of Contractors to insure all codes, specifications, and engineering standards are compiled by. Perform inspections on mechanical equipment and QA-QC Procedures. Maintain that Quality Control requirements in accordance with engineering standards are within code requirements. Interface with Prime Contractor QC on code clarification and interpretation. Activities include daily interface with Prime Contractor contacts, insure code compliance, maintain a record keeping system, evaluate non-conforming items, and provide correction action. Participate in meetings relative to contracts, proposals, site quality problems, and schedules. Request testing of equipment and coordinate with appropriate personal. Developed/written long term equipment storage procedures.

**L-Con Constructors / Power Div. — April 1995 – June 2001 (6 yrs.)****Millwright Superintendent****New Construction Combine Cycle Power Plant(s) - USA****MAJOR EQUIPMENT:** New Installations / Outages for: ABB GT24 Gas Turbines, GE 7FA Gas Turbines, GE D11 Steam Turbines, Siemens Westinghouse W501G, Siemens 35MW Steam Turbines, Siemens Vax Units 64.3A Steam Turbines

Various projects responsible for establishing detailed direction for the installation and/or outage including strict adherence to goals and milestones. Recruiting technical staff managed personnel, customer satisfaction, supervision, safety, field progression, and meeting financial objectives. Resources, including interactions with outside contractors and vendors. Services were centered in three major categories, namely; records of all test-certs/data forms, final alignments, and plant maintenance. Also, responsible for maintaining all inner turbine modules during outages and documenting proper procedures for overhauling (10) ABB GT24B gas fired turbines. Our direct involvement accounted for new policy standards during outages.

**IDAB, Incorporated — May 1992 – April 1995 (3 yrs.)****Machinist Supervisor****Machine Shop Operations – Langley, VA**

Established criteria for IDAB's machine shop operations ensuring all employees adhered to all applicable guidelines. Primary contributor to the administration of IDAB's Quality Assurance / Quality Control programs. Provided training for junior personnel concerning the scope and function of this program. Provided invaluable knowledge during initial conception of products as well as the forethought of superior procedures resulting in a significant increase in quality and profitability. Assisted in the development of fabrication and testing techniques for both complex robotic equipment and individual components. Supervised the manufacturing of prototypes and "one-off" electromechanical material handling systems. Primary contact with customers to assess the nature of their system fault, ordering of all necessary parts and supplies, securing travel arrangements to and from customer sites and any follow-up needed to ensure customer satisfaction, in addition to coordination of service contract renewal and negotiation.

**Dresser-Rand — June 1985 – May 1990 (5 yrs.)****Field Service Technician / Machinist****Field Service (FS) – Hampton & Portsmouth, VA****MAJOR EQUIPMENT:** Dresser-Rand DR63G-60 Gas Turbines, Dresser-Rand DR62G Gas Turbines, Ingersoll-Rand Nitrogen Compressors (450Hp), Ingersoll-Rand Multistage Centrifugal Pumps, 700,000 GPM IR Vertical Pump, CDP-224 Compressors, I-R 6,000psi H-P Compressors, I-R High Pressure Cap Units, I-R Axi-vac Screw Compressors

Primarily in charge of overhauling the first Ingersoll-Rand 700,000 gpm centrifugal multistage pump in the continental United States for Surry Nuclear Power Plant VA on time and under budget by over 25 percent. I received a US Patent for the implementation of a lathe adapter allowing for a 30-day turn-around of spiral rotors with a manufacturers lead-time of 6 to 9 months producing annual company savings \$3.5m.

**Horne Brothers Shipyard — May 1982 – June 1985 (3 yrs.)****Field Machinist (1st Class Mechanic) / Structural Foreman****Field Service (FS) – Hampton, VA**

I was responsible for accurate layouts and installations of multi-million dollar weapon systems on board numerous US Naval Vessels. Received a letter of commendation from NASA Research Center, Langley Virginia for exceptional welding ability during the wind-tunnel water-cooling tower piping installation resulting in a project cost savings in excess of \$1.5 M

## Education

### Wake Technical Community College

- ✓ **Degree;** Associate / Applied Science, Automation/Robotics Technology, 1993-1995

### Thomas Nelson Community College

- ✓ **Certificate;** Computer Aided Design Auto-Cad 11, 1994-1994

### J. Sergeant Reynolds Community College

- ✓ **Certificate;** Microcomputer programming and Applications, 1992-1992

### Thomas Nelson Community College

- ✓ **Certificate;** Architectural Drafting, 1986-1986

### Bell & Howell

- ✓ **Certificate;** modern electronic components and techniques., 1978-1983

### Heath Home Kits

- ✓ **Certificate;** Basic principles, controls of circuit building and faultfinding, 1978-1983

### Marathon Letourneau

- ✓ **4yr.** Apprenticeship, Machinist, 8,000 hours accredited/journeyman-worker, 1978-1982

### Hinds Community College

- ✓ **Certificate;** Welding Fundamentals, 1979-1981