

Education:

Bachelor's of Science Degree, Electrical Engineering, University of Houston

Certifications/Licenses:

FE (TX)

Summary: Six years experience in engineering and design of downstream oil & gas and petrochemical facilities. Developed project engineering deliverables such as one-line diagrams, load lists, equipment lists, specifications, data sheets, power system studies, and technical equipment evaluations. Programming skills and advanced skills with SmartPlant Electrical (SPEL) and ETAP to perform load flows, short circuit, motor-starting analysis, harmonic analysis, and underground cable calculations. Electrical equipment technical procurement experience to execute electrical and instrumentation installations. Experience with NEC/ANSI/IEEE/NEMA/IEC standards and application.

Specific Experience:

Design Engineer III
Fluor
07/2012 - 04/2013

ExxonMobil Iraq Limited
West Qurna 1 Development
Near Basra, Iraq

Fluor conducted concept selection screening studies for a crude processing facility to be constructed in the West Qurna field.

The SmartPlant Electrical Administrator for the project. Developed naming conventions and over 100 reports including Load Schedules, Cable Schedules and Equipment List according to Fluor and client standards. Configured, populated, and checked project equipment in the database to accurately roll up values to correctly populate output reports. Issued reports from SmartPlant database and managed revisions of reports in database. Helped guide team members to accurately input information to reflect correct output. Verified consistency of the data in SmartPlant database with bid Packages, IEC standards and project specifications. Modified library data and SmartPlant data dictionary manager to reflect project parameters. Batch sized cables for the project with SmartPlant Electrical. Reprogrammed reports and managed additions of database fields as changes in project occurred.

Design Engineer I
Fluor
04/2010 - 07/2012

Qatargas Operating Company Ltd.
Jetty Boil-Off Gas Recovery
Ras Laffan, Qatar

The JBOG Recovery Project is a world scale environmental project to minimize the amount of gas flared at Ras Laffan to the fullest extent practicable, by recovering and collecting the boil-off gas at each berth and using it elsewhere as fuel gas.

Run Load Flow, Short Circuit, Motor Starting, Harmonic Analysis, Grounding, and Cable Sizing Studies on JBOG electrical network. Wrote report on all studies for client review. Modify and Code Smartplant Electrical Templates for JBOG deliverables such as Electrical Equipment List, Electrical Load List,

Electrical Cable Schedule, and Drum Reports. Project administrator for SmartPlant database including updating and maintaining Engineering Manager, Data Dictionary Manager, Catalog Manager, Filter Manager, Options Manager, Cable Library, and Smartplant database. Solve all Smartplant JBOG related problems from New Delhi. Import initial ETAP information into Smartplant Electrical within the Nextgen initiative to save man hours. Create and Maintain Electrical Equipment list. Calculate Heat Loads for HVAC. Perform electrical Calculations for Cable Sizing, De-rating, and Voltage Drop. Update project specifications. Create datasheets, RFQ and PO packages for six 2MVA distribution transformers, 4 High Resistance Grounds, ELICS interface RTU, and 2 Substation Annunciators. Perform bid tabs for said RFQ packages and interface with vendors to declare them technically acceptable based on project specifications. Factory Acceptance Testing of 2 MVA transformers and High Resistance Grounds in Istanbul, Turkey and Bursa, Turkey. Size power cable for High, Medium and Low Voltage power distribution. Design Electrical Integrated Control System network for JBOG project based on Client requirements. Create I/O list for RTU and Annunciator. Squad Check Vendor data for said purchase order packages and interface with vendors.

Associate Design Engineer III (Lead Electrical Engineer (Mock Project))

Fluor

9/2009 - 4/2010

Nextgen Pilot Project 2

Sugarland, Texas, United States

Simulate designing a gasification plant by using Nextgen software. This project focused on the integration of different softwares with different disciplines

Discovered the ETAP to SPEL interface and got approval by Department Manager to work on the integration. Successfully completed the bidirectional interface between SmartPlant Electrical and ETAP and made presentation to all electrical leads at Fluor. Worked on the integration between SPEL and SP3D working with the todo list in SPEL from other disciplines. This included achieving the bidirectional cable routing information from SPEL to SP3D. Discovered an alternative way to do Area Class in SP3D and wrote paper on the capabilities to automatically publish area class drawings. Updated one line symbology to match closer to Fluor standards. Created a transformer Load Summary report in SPEL. Found error in the cable sizing SPEL uses in 2007 version.

Associate Design Engineer II

Fluor

4/2009 - 9/2009

Kuwait National Petroleum Co.

Clean Fuels Project 2020

Shuaiba Industrial Complex, Kuwait

Fluor performed pre-FEED and FEED services for a major revamp of three refineries in Kuwait to produce ultra low sulfur distillates to meet Year 2020 specifications.

Update and manage Load List and Equipment list for MAA and MAB

Associate Design Engineer II

Fluor

02/2009 - 04/2009

TX Energy

Texas Gasification Project

Beaumont, Texas, United States

Fluor provided FEED and EPC for the Gulf Coast project that was to produce low-cost intermediate chemicals including methanol, hydrogen, and ammonia.

Update and Maintain ETAP model, Assist professional engineer with Temporary power requirements including developing multiple CAD drawings, Aid with 230kV Transmission line and transformer yard estimate, Aid in preparation of RFQ package for electrical equipment and prefabricated buildings, Review Area Class drawings, Write detailed report on load flow, short circuit, and motor starting studies analyzing ETAP calculations. Assist Electrical Engineering design with CAD work.

Associate Design Engineer II

Fluor
08/2008 - 02/2009

Valero Refining Co.
MSAT II
St. Charles, Louisiana, United States

Fluor began front-end engineering and design for a 75,000 barrels per day reformer and aromatics extraction project to bring a refinery into compliance with federal Mobil Source Air Toxics (MSAT) II regulations; the project was later postponed.

Develop and analyze Bid Tab for electrical equipment, Data sheets addendum for electrical equipment, HVAC sizing estimate (calculating heat load), Create specification for prefabricated stainless steel and galvanized steel buildings, Create a specification for power factor correction capacitors, Sizing of transformers, Obtain and analyze bids for prefabricated substations (precast, stainless steel, and galvanized steel buildings), Heat tracing attachment C, Coordinate with multiple departments and develop documents to obtain heat tracing estimate in a timely fashion, Analyze heat trace bids and summarize heat trace estimate including area map, panel locations, substations and detailed breakdown of heat trace system, Size MCC's, and Develop preliminary MCC layout. This includes completing all research, calculations, and design to accurately turn over the mentioned diagrams and documents.

Associate Design Engineer I

Fluor
08/2007 - 08/2008

Marathon Petroleum Company
Garyville Major Expansion
Garyville, Louisiana, United States

The project entailed a new crude/vac unit, hydrocracker, coker, NHT, CCR, KHT, sat gas, and sulfur block (sulfur, amine, SWS, tail gas) at a grassroots 190,000 BPD refinery.

Use programs, engineering knowledge, and experienced engineering oversight from Professional Engineers to develop engineering deliverables. These deliverables include but are not limited to; One line diagrams, Area Classifications, Electrical Load List, Electrical Equipment List, Cable Schedules, Wiring Diagrams, Heat trace design, etc. Developed RFQ documents and complete thorough bid evaluations for instrument cables, fiber optic cables, electric heat trace systems, and electrical testing work. Throrough bid evaluations and recommendation of Heat trace vendor. Update and mainatin Smartplant database including loading of information, extracting information, and software setup. This includes completing all research, calculations, and design to accurately turn over the mentioned diagrams and documents.

Intern/ Co-op Electrical Engineering

ABB Lummus Global
09/2005 - 04/2007

Westlake
Westlake Ethylene Facility
Houston, Texas, United States

Use programs such as Smart Plant, Intools, AutoCAD, Microstation, Excel, PDS and various databases to perform tasks in assisting project engineers with billion dollar projects within plant design. This includes working with: Instrument Index's, P&ID's, Instrument Location Plans, Instrument Loop Drawings, Junction Box Wiring Schedule's, Instrument Process Installation/Mounting Details, Area Classification, Grounding Plans, Lightning Plans, Cable Schedules, Piping Orthographics, Piping Isometrics, Single line diagrams for low voltage MCC's, and various CAD work.

Field experience- 2 weeks at Westlake Ethylene Facility in Lake Charles, La-

Performed Demolition Package which included gathering the various essential drawings and talking with various chief and senior engineers from different disciplines in order to comply with all specifications. This also included hand markups of Junction Box Wiring Schedules and P&ID's.

Training:

Fluor Electrical Design School (2007)

Schweitzer Engineering Laboratories Motor Protection (2008)

Schweitzer Engineering Laboratories New User Relay Training (2008)

ETAP 114 Power System Engineering 4-day Workshop by OTI (2008)

SPEL Advanced User Training (2012)