Khiem C. Ngo

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Expertise

Mr. Ngo is an experienced control and automation engineer in the pipeline industry with over 39 years. He has designed, installed, and commissioned countless control/automation systems for major oil and gas pipeline companies that included Oxy, Centurion, Exxon, Mobil, Wolverine, LDH, etc. His significant project experiences and knowledge during this time cover from oil field production to offshore facilities, from crude oil to refined products, and CO2.

While at Mobil Pipeline Co. in the mid 80's, Mr. Ngo is responsible for upgrading its control systems from an old proven technology and piece of equipment, the RTU (Remote Terminal Unit) to a smarter but not quite yet commonly used device in the industry, the PLC (Programmable Logic Controller). In time this has increased many fold the automation level, and much improved the operation of pipeline facilities.

- Extensive knowledge and experiences in pipeline control and automation, SCADA
- Extensive knowledge and experiences in crude, CO2, products pipeline operations
- Excellent project teamwork, troubleshooting skills, and problem analysis and solving capabilities

Education

Bachelor of Science – Electrical Engineering, ***University of Texas at Arlington,*** *Arlington, Texas* — *1981*

Career History and Sample Accomplishments

Sr. Control/Automation Engineer, *Vanderpool Pipeline Engineers, Inc.* — 2016 – present

- Manage, design, start-up, test, and commission many pipeline SCADA and Control projects for Centurion PL
- Major projects and accomplishments include:
- Slaughter Tank Farm that consisted of replacing 3 major PLC/HMI systems including Design, programming, testing, on site installation, check-out and commissioning
- Monroe station control upgrade to accommodate increase volume throughput
- Tall Cotton Injection Station: control system design, installation, test, commissioning
- Midland Tank Farm – Andeavor Connection: control system design, installation, test, commissioning
- XTO CTB320 Injection Station: control system design, installation, test, commissioning
- Mallet Station Electrical/Control upgrade: upgrade PLC/HMI systems to communicate, log, trend electrical data from recloser, main breakers, motor protection relays, etc.

Sr. Control/Automation Engineer, *SCADA Design Specialists, Inc.* — *2001 – 2016*

- Manage, design, start-up, test, and commission many pipeline SCADA (Supervisory Control and Data Acquisition) and Control/Automation projects for various pipeline clients that include ExxonMobil, Oxy (Centurion and Bravo PL), Sheep Mountain, Kinder Morgan, Energy Transfer Partners, Transpetco, Wolverine, Oakdale Gas Processing.
- Major projects and accomplishments include:
- Upgrade major Centurion Pipeline pump stations, replacing old equipment with new PLC and HMI. Design, test, and commissioning of these systems.
- Represent Bravo Pipeline as the main control/automation engineer since 2006 in all projects, including new facilities, upgrade, or maintenance programs by working with various engineering firms, e.g. Mustang Engr. and BPL engineering and field technical staff. Primary tasks cover from design phase through installation, and commissioning of such system.
- Design and commissioning of new control/automation systems to integrate Sandridge pipeline facilities into Bravo PL SCADA host.
- Design, test, checkout, and commissioning of the automation/control systems for

Century Pipeline that runs from Denver City, TX to the Century Gas Plant outside of Ft. Stockton. This includes two major pump stations at Denver City and McCamey.
- Upgrade control/automation systems for LDH's 8 NGL pump stations (later acquired by Energy Partners) from West TX to the Gulf Coast
- Upgrade control/automation systems for all of former ExxonMobil pipeline facilities in West Texas (major stations, booster stations, injection sites, meter sites, 20 tank farm in Midand) following the acquisition of these assets by Oxy. Responsible for design, test, checkout, and commissioning of these systems that include PLC/HMI, flow computers, tank gauging, etc.
- Due diligence evaluation of former ExxonMobil crude oil and CO2 pipeline systems and facilities described above for Centurion and Bravo Pipelines.

- Consolidation of Exxon and Mobil Pipelines' Operation Control Centers, moving the MPL control center from Dallas to Houston following the merger of the two companies. Responsibilities cover the integration of former Mobil field equipment into the new system.

Engineering Advisor, Center of Excellence, *Mobil Pipeline Company* *1998 – 2001*
- Provide leadership and technical expertise to various engineering groups and business units in the field of Pipeline Control & Automation

1994 – 1998

Sr. Engineering Specialist, Engineering, *Mobil Pipeline Company*
- Implement more automation in pipeline facilities to better and streamline operation, helping the control center by using the PLC and its smart capabilities as the control platform
- Responsible for major control/automation pipeline and terminal projects that include installing and converting PLCs into RTUs, using Modbus communications protocol to replace antiquated TANO RTUs and its proprietary communications

Design Engineer, Engineering, *Mobil Pipeline Company* *1988 – 1994*

Major projects include:
- M70 Pipeline Expansion: Increase volume throughput from San Joaquin Valley to the Torrance, CA refinery by installing larger pipeline and adding additional pumping capacity at 8 pumping stations. Responsible for the design and programming of PLC equipment at these stations and block valves.
- MOCO and Lost Hills steam injection expansion (San Joaquin Valley, CA): installation of new water softening plant and steam generators to produce more quality steam that is used to inject into oil reservoir to produce and recover more heavy oil. Responsible for the design and programming of PLC equipment at these plants.

Field Engineer, Telecommunications Electrical & Construction, *Mobil Pipeline Company.* *1985 – 1988*
- Serve as project and field engineer to the Dallas Design Engineering group in various pipeline upgrades and new installations in different parts of the country
- Major projects include Paulsboro station (NJ), Waterloo station (NY), Wolverine Pipeline automation (IL, IN, MI)
- Perform electrical rate analysis to optimize power utilization to save power cost
- Negotiate with utility companies for most favorable rate in terms of usage and peak power reduction

Field Electrical Engineer, Engineering, *Mobil Exploration and Producing, US.* *1981 – 1985*

Major projects and tasks include:
- High Island 575 Production Platform: Work with Brown & Root to develop, design, test, install, and commission of the platform safety system
- Provide electrical and control engineering to field engineers and production offices and

facilities in Texas and New Mexico