NOVA KURNIAWAN

Electrical & Instrument Construction & Commissioning Engineer, Supervisor, Coordinator EPCI Industries



novakurniawan@gmail.com +6281372174754 GMP J-18 Tanjung Sengkuang Batam INA 38 YO

Career Summary

More than **13 years** of solid experience in Oil and Gas EPCI industries starts from Design Engineer, Construction Engineer, Offshore Hook-Up Engineer, Pre-commissioning & Commissioning Engineer and commissioning Coordinator. Graduated from Bandung Institute of Technology with Oil & Gas **Instrument & Electrical** discipline expertise and multidiscipline coordination of **Commissioning** with max 110 personnel under my organization. The facilities those I have been built including WHP, CPP, LQ, E-House, ORF, Jacket, Buoyancy Tanks & LNG Train Modules owned by Multinational Company such as Kodeco Energy, PTTEP, CLJOC, WEL, Petrobras, Petronas, & Yamal LNG.

Experience (May 2004 – Feb 2018)

EIT Company Site Supervisor (Zawtika 1C Project) PTTEPI Myanmar (Aug 2017 – Feb 2018)

EPCI of Zawtika 1C consist of 4 WHP (WP09, WP08, WP10, WP11) • with 20 Wellhead for each.

Role and Responsibility:

- Report to Company Senior Electrical & Instrument Engineer.
- Provide E&I daily construction progress report to CSR.
- Drive contractor to work correctly first time, every time, safely, affectively and progressively according to schedule to meet the LO and SA target date with 0 Punch.
- Monitor Electrical, Instrument, and Telecom daily construction plan of contractor and monitor actual work execution.
- Evaluate contractor's work process and identify constraint and problem then provide recommended solution to contractor to improve the progress and quality.
- Liaise with Company QA/QC group to highlight Punch list during construction or far away before mechanical completion stage and instruct contractor to accommodate the comments. This program is to reduce PL to achieve Company target Sail Away with 0 Punch.
- Commissioning of Thermo Electric Generator, Solar Panel, DC
 Distribution System, AC Distribution System including Lighting and Small Power, Navigational Aids System, Wellhead Control Panel, PCS / SIS PLC System and Sand Monitoring System.
- Review and approve Red Line Mark Up and As-Built drawing.
- Review and approve Mechanical Completion & System Commissioning Dossier prepared by Contractor.

Commissioning Coordinator (Yamal LNG Project) McDermott Indonesia (Sep 2015 – May 2017)

EPCI of Yamal LNG Train 2 & 3 consisting of 3 Electrical Substation and 6 Process and Utility Modules.

Role and Responsibility:

- Report to Construction Manager.
- Prepare pre-commissioning & commissioning execution plan of the LNG Train module project.
- Manage preparation of completion and pre-commissioning procedures.
- Raise required technical clarification and technical query for any site pre-commissioning issues.
- Manage of preparation of equipment tags, sub-system allocation, generate test pack number and limits, and test package dossier.
- Manage preparation of pre-commissioning test equipment i.e.: Compressor, Dryer, Booster, Generator, Pumps, Electrical Hand tools, and consumables.
- Mobilize and demobilize man power according to precommissioning planning histogram.
- Manage execution of MC, PC, and Comm e.g. hydrotest, pneumatic test, flange management, P&ID conformity check, gross air leak test, maximum operating pressure test, electrical cable test, lighting energization, valve leak test, PRV seat leakage test, control valve function test, instrument calibration, and vessel closure acceptance.
- Manage LNG module final drying and N2 purging of piping system.
- Manage execution of works according to ITP (Inspection Test Plan) and ITR (Inspection Test Record) or QCF (Quality Control Form) by Easy Plant.

EIT-Lead Construction Engineer (Kepodang Project - Petronas) McDermott-Indonesia (Dec 2012 – Sep 2015)

EPCI of Kepodang Field Petronas Carigali Muriah consist of CPP, WHMA, WHTC, & ORF.

Role and Responsibility:

- Take Off Electrical and Instrument bulk material for CPP, Wellhead Platform, and ORF Control Building.
- Purchase, conduct Technical Bid Evaluation, and expedite procurement on material required on site based on construction schedule.
- Issue, control, and monitor of work package for construction of Electrical, Instruments, and Telecom Equipment of CPP & Wellhead facilities includes LV Switchgear, UPS, Lighting, Main Generators, Essential Generator, Gas Compressors, Air Compressors, Heat Exchangers, Separators, Cranes, PCS & SIS Control System, Process Instrument and Control Valves, Chemical Injections, Nav Aid, VSAT, Wimax, Radio, HVAC,

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Fire & Gas, Wellhead Control Panels, Helideck Lighting and Gas Metering.

- Maintain availability of electrical and instrument bulk
 materials e.g. trays, cables, glands, lugs, ferrules, tubing, fittings, washers, etc.
- Solve technical discrepancies and issues on site and raise site query and technical query if involved of design change.
- Monitor man hour consumption against actual progress to make weekly productivity of EIT discipline.
- During ORF Drive sub-contractor to complete construction of Onshore Control Building for Kepodang.
- During ORF; Lead sub-contractor & vendor to conduct precommissioning and commissioning LV Switchgear, UPS system, Lighting System, Air Conditioning Ventilation
 System, Fire & Gas System, Network System for Onshore Control Building - Semarang.

<u>Precommissioning Engineer - EIT (Papa Terra Project -</u> Petrobras)

McDermott-Indonesia (Jan 2012 - Jun 2012)

EPCI of 3 Electrical Houses (Switchgear, UPS and Battery Room, and VSDS Room).

Role and responsibilities:

- Coordinate MC/PC-ITR inspection for Papa Terra E-House for TLP on sub-contractor site.
- Drive sub-contractor to execute completion and precommissioning activities for electrical, instrument, and HVAC.
- The electrical completion and pre-commissioning for HV switchgear, UPS system incl battery room, Lighting system, VSDS system, and various control panel.
- The instrument completion and pre-commissioning for fire & gas system and PAGA system.
- The HVAC completion and pre-commissioning including
 ACCU, AHU, and dampers.

MC-PCC-Commissioning Engineer (NRB Project-Woodside) McDermott-Indonesia (Sep 2008 - Dec 2011)

EPCI of North Rankin B Sub-Structure Jacket, Buoyancy Tanks, and Bridges

Role and responsibilities:

- Manage to mechanically complete of jacket upending control system including: hydraulically operated valves and jacks thru umbilical, hydraulic flushing work to achieve NAS or ISO equivalent, electrically operated pressure monitoring system, and pneumatically operated inflatable packer element.
- Manage to mechanically complete of pipe works on jacket and bridge; hydrostatic, pneumatic and leak test, drying to

- achieve -20 deg C dew point, flange management, and valve leak test.
- Manage leak test of jacket legs and flotation tank compartments.
- Witness FAT and support of Site Acceptance Test (SAT) and commissioning activity of the UCC (upending control center), HPU (Hydraulic Power Unit), hydraulically operated valves and jacks thru umbilical, electrically operated pressure monitoring system, and pneumatically operated inflatable packer element.
- Manage E&I system (Lighting, F&G, and PAGA) on North and South Bridge of North Rankin B to achieve mechanical completion.
- Develop completion management system for systematically acceptance report to PMT and Client by ITR, Sub-system & System.

<u>Precommissioning Engineer - Instrument</u> (Su Tu Vang Project-CLJOC)

McDermott-Indonesia (Mar – Aug 2008)

EPCI of Integrated CPP and Wellhead and Living Quarter Platform.

Roles and responsibilities:

- Review P&ID system/sub-system drawing allocation CPP & Living Quarter.
- Review instrument specification and data sheet and execute calibration and function test i.e. pressure, level, flow, temperature instrument, and actuated valves.
- Review instrument, F&G, and PAGA Hook Up, installation, wiring detail and manage completion acceptance.
- Review instrument air tubing manifold distribution detail, hydraulic distribution detail, and process connection detail and execute hydrostatic and pneumatic testing.
- Review instrument cable schedule and execute low voltage megger and continuity testing.

<u>Commissioning Engineer - Instrument</u> (Arthit CPP Project-PTTEP)

McDermott-Indonesia (Aug 2005 – Feb 2008)

EPCI of CPP Platform and connecting bridges to Living Quarter and Wellhead.

Roles and responsibilities:

- Populate completion management database based on System/sub-system drawing boundary allocation for instrument tagged items.
- Execute shop calibration and function test of instrument i.e. pressure, level, flow, and temperature flow instrument.

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- Review PCS & SIS I/O list & Loop Diagram and manage cold and hot loop check during pre-commissioning.
- Energize DCS and checking all face plate, trending, alarm summary on the DCS HMI during pre-commissioning and commissioning.
- Execute Cause and Effect Matrix for ESD test and F&G test.
- Create commissioning procedure of SIS, PCS, F&G, and PAGA and also review control system interface on the mechanical system i.e. air compressor, fire water pump, chemical injection, etc.
- Execute the control system function during commissioning according to process control narrative.
- Prepare test equipment, tools, and consumable material required for pre-commissioning and commissioning activity.
- Manage and hands on pre-commissioning activity in the field; all type instruments and valve of PCS, SIS, & F&G function of FIELDBUS & HART instrument, DI/DO switch and relay.
- Develop completion management system for systematically acceptance report to PMT and client by ITR, Sub-system & System.

<u>Instrument Engineer</u> (Kodeco KE40,KE30, HESS WHP-A) Pt. Reka Patria Ekaguna-Indonesia (May 2004 - Jul 2005)

EPCI of Wellhead Platform KE40, KE30, WHP-A

Roles and responsibilities:

- Review P&ID drawing.
- Review Cause and Effect Matrix for ESD and F&G.
- Review instrument and F&G location plant or lay out.
- Review instrument and F&G Hook-Up drawing and installation detail.
- Review instrument and F&G wiring diagram, loop diagram, block diagram, and termination drawing.
- Review instrument air manifold distribution detail.
- Preparing instrument sizing calculation of control valves,
 PSV, pressure regulator, orifice.
- Preparing field instrument data sheet and specification (control valves, flow instrument, level instrument, on-off valve, pressure instrument, PSV, temperature instrument)
- Preparing control system electric I/O list and pneumatic I/O list.
- Preparing instrument cable schedule, tubing schedule, and instrument index.

Education

Degree in Bachelor Engineering (Sarjana Teknik) GPA 3.22
Physics Engineering
Institut Teknologi Bandung (ITB), Indonesia
March 2004

Professional Affiliation

Persatuan Insinyur Indonesia

Training and Courses

- Safety Induction and Refreshment
- Distributed Control System
- Foundation Field Bus Implementation Training
- Lock Out Tag Out (LOTO) and Permit to Work Course
- CMP Cable Gland Awareness Course
- Fundamental Sea Survival Course / Bossiet / HUET
- Fire Fighting Training
- Electrical Equipment Hazardous Area
- Projecting Management Execution
- Pressure Vessel Inspection
- Honeywell SIS System

Company

Aug 2017 – Feb 2018 : PTTEPI Myanmar

Aug 2005 – May 2017 : pt. McDermott Indonesia

• May 2004 – Jul 2005 : pt. Reka Patria Ekaguna