

Muhammad Rafiuddin Mar Sidek

Turbine Controls & I&C Field Service Engineer

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PROFESSIONAL SUMMARY

Field Service Engineer with 8+ years of international experience in gas and steam turbine controls, I&C commissioning, industrial automation, startup, and live-plant troubleshooting. Current Siemens Energy Turbine Control Expert with hands-on delivery across SPPA-T3000, field instrumentation, logic validation, protection, fuel and valve systems, and customer handover.

CAREER HIGHLIGHTS

- Delivered controls and I&C support across **20+ gas-turbine projects** and multiple steam-turbine projects in 14 countries.
- Served as the primary on-site I&C focal point during SST-3000 commissioning in Ivory Coast, guiding troubleshooting, control-logic explanation, operator training, and progress to commercial operation within approximately two months.
- Recovered a failed Braun module without an available backup by studying vendor documentation, building a recovery cable, extracting a working configuration, and cloning the replacement module.
- Built full-lifecycle automation capability spanning equipment selection, drawings, PLC/HMI engineering, FAT/SAT, commissioning, startup, troubleshooting, and handover.

PROFESSIONAL EXPERIENCE

Field Service Engineer – Turbine Control Expert | 2023–Present

Siemens Energy | Petaling Jaya, Malaysia | Global Projects

- Execute cold/hot commissioning, recommissioning, startup support, turbine tuning, troubleshooting, reliability runs, and technical handover for international gas- and steam-turbine projects.
- Own I&C scope from SPPA-T3000 application servers and automation controllers through field instrumentation, loop and signal checks, permissives, interlocks, protection, alarms, and event analysis.
- Support SGT5-8000H, SGT5-4000F, SST-5000, and SST-3000 platforms, including fuel-gas and selected fuel-oil/changeover work, GT fuel-valve/KV tuning, ESV/CV checks, and valve stroking.
- Coordinate with commissioning leads, operations, customers, and remote experts as a technical focal point during startup pressure, outage recovery, and return-to-service activities.

Field Service Engineer – DCIM / IT Systems | 2022–2023

Schneider Electric | Petaling Jaya, Malaysia

- Commissioned and serviced DCIM and monitoring systems for data centres and critical facilities using Data Center Expert, EcoStruxure IT Advisor, NetBotz, environmental sensors, and facility-alarm interfaces.
- Performed device, communication, monitoring-point, and alarm verification; resolved visibility and connectivity issues; and delivered customer-facing closeout and handover.

PROFESSIONAL EXPERIENCE (CONTINUED)

Control System Engineer | 2018–2022

Expet Controls | Puchong, Malaysia

- Delivered oil-and-gas and industrial automation projects covering PLC/DCS/SDS/ICSS, HMI/SCADA, instrumentation, generator controls, and industrial communications.
- Handled the engineering lifecycle from equipment selection, drawings, logic and HMI development, and panel support through FAT/SAT, loop testing, commissioning, startup, maintenance, troubleshooting, and customer handover.
- Supported diesel-generator controls, compressor anti-surge, chemical-injection skids, DCS/SDS upgrades, HVAC recommissioning, fire-water pumps, IMCS, and tank-level gauging systems.

SELECTED PROJECT PORTFOLIO

- **SGT5-8000H:** recommissioning and controls support in Malaysia and Japan.
- **SGT5-4000F:** commissioning, recommissioning, tuning, and upgrade support across Bahrain, Morocco, Egypt, the United Kingdom, and Oman.
- **SST-5000 / SST-3000:** steam-turbine recommissioning and commissioning support, including I&C focal-point responsibilities and operator guidance.
- **Industrial automation:** generator, compressor, chemical-injection, DCS/SDS, HVAC, fire-water, motor-control, and tank-gauging packages.

TECHNICAL EXPERTISE

Turbine platforms: SGT5-8000H, SGT5-4000F, SST-5000, SST-3000

Control systems: SPPA-T3000, WinCC, TIA Portal, Siemens S7, Studio 5000, RSLogix, FactoryTalk, GE Proficy/CIMPLICITY

Commissioning: Cold/hot commissioning, startup, recommissioning, FAT/SAT, reliability runs, logic tracing, alarm/event analysis, technical handover

I&C and automation: Loop checks, signal scaling, instrumentation, permissives, interlocks, protection tests, PID and valve tuning, PLC/DCS/SCADA/HMI

INTERNATIONAL FIELD EXPERIENCE

Malaysia, Thailand, Japan, Philippines, India, Kuwait, Bahrain, Qatar, Oman, Egypt, Morocco, South Sudan, Ivory Coast, and the United Kingdom.

EDUCATION & CREDENTIALS

- Bachelor of Electrical Engineering (Electrical-Mechatronics), Universiti Teknologi Malaysia, 2014–2018
- Foundation of Engineering, Universiti Teknologi MARA, 2013–2014
- OGSP – valid through 7 May 2028
- Previous offshore credentials: BOSIET, Offshore Medical, PTW Level 2, and CIDB