MUHAMMAD SAAD HAFEEZ

Chartered Mechanical Engineer — Power Plant Performance, Maintenance & Projects
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PROFESSIONAL SUMMARY

Chartered Mechanical Engineer (CEng MIMechE) with 15+ years in power generation. Currently Deputy General Manager – Power Plants at OMS, leading independent power plant performance testing and engineering consultancy assignments for utilities, IPPs and regulators. Deep hands-on leadership of combined cycle plant maintenance — LM6000 gas turbines, steam turbines and HRSGs — including Level 3 gas turbine maintenance, Level B & C steam turbine overhauls and API 510 HRSG inspections. Owner's-engineer experience on a US$55M EPC conversion project, technical leadership of a six-station multi-year tariff petition, and independent bid evaluations for 660 MW-class plants. Earlier career also includes operations and maintenance leadership of four reciprocating gas-engine power plants at Omni Group (22 engines, 78.1 MW) and Jenbacher fleet maintenance and overhauls at K-Electric. Track record of reliability improvement, outage delivery and safe, cost-effective operations, supported by SAP PM, ISO 55001 asset management and DuPont process safety systems.

CORE COMPETENCIES

Performance Testing & Monitoring (ASME PTC 46 / PTC 22) • Combined Cycle Plant O&M • Gas & Steam Turbine Overhauls • Maintenance Strategy, Reliability & Condition Monitoring • HRSG Inspection (API 510) • Owner's Engineering & EPC Projects • Independent Bid Evaluation • Tariff & Regulatory Technical Support • Decommissioning & Plant Disposal • SAP PM / CMMS & ISO 55001 Asset Management • OPEX / CAPEX Budgeting & Vendor Management • Process Safety Management (DuPont PSM)

PROFESSIONAL EXPERIENCE

Deputy General Manager – Power Plants | OMS Private Ltd. *Feb 2023 – Present*

- Led the thermal performance testing of the 900 MW BQPS-III combined cycle power station (RLNG and HSDO fuels): developed test procedures in accordance with ASME PTC 46 and PTC 22, conducted the performance tests, analysed results and submitted the final report to NEPRA.
- Served as team lead for the thermal performance testing of the 1,263 MW RLNG combined cycle plant of Punjab Thermal Power Ltd.: reviewed OEM test procedures for compliance with international PTC codes, oversaw reliability and performance tests, analysed data and submitted the final report to CPPA-G.
- Technical lead from OMS for K-Electric's Multi-Year Tariff (MYT) petition to NEPRA covering all six generating stations, including evaluation of O&M costs and tariff rationalisation; EY acted as independent financial consultant.
- Independent consultant for pre-qualification and technical, commercial and financial evaluation of bids for operations & maintenance of the coal jetty of the 2×660 MW China Power Hub Generation Company plant.
- Independent consultant for technical and commercial evaluation of bids for transportation, disposal and management of ash from the 660 MW Thar coal-based power plant of Engro Powergen Thar (Pvt) Ltd.
- Site Manager and engineering consultant for the disposal of Units 3 & 4 at BQPS-I Thermal Power Station for K-Electric — a PKR 4.8 billion project involving dismantling of boilers, turbine, generator and transformer totalling over 15,000 tons.

Manager Maintenance | K-Electric Ltd. *Jun 2019 – Feb 2023*

Korangi Power Complex (KPC) — 248 MW combined cycle plant (4 × GE LM6000 gas turbines, 2 × steam turbines, 2 × WHR boilers):

- Planned and supervised Level 3 maintenance of LM6000 gas turbines, including major module replacements, hot section exchange, HPC blade replacement and alignment.
- Executed and supervised Level B & Level C major overhauls of steam turbines and associated systems, managing resources and spares through to reliable start-up.
- Planned and supervised HRSG annual inspections in accordance with API 510, together with inspection and maintenance of associated mechanical, electrical and instrumentation systems.
- Managed plant inventory of over PKR 500 million and the annual OPEX and CAPEX budget for the plant; handled procurement and vendor/OEM management.
- Drove implementation of the DuPont Process Safety Management system across the complex.

Senior Manager Engineering & Operations (Power Division) | Omni Group of Companies *Apr 2017 – Jun 2019*

- Led operations and maintenance of four reciprocating-engine power plants — Thatta Power, Omni Power, Shikarpur Power and Dadu Energy (22 Jenbacher J620 engines, 78.1 MW combined including the Thatta waste-heat-recovery steam generation) — ensuring high availability and reliability.
- Implemented improvement initiatives across the stations, including reduction of plant parasitic losses and enhancement of thermal efficiency of generating units.
- Led the development of a waste heat recovery steam generator project at Thatta Power.
- Worked on project feasibility, development and implementation of a 50 MW bagasse-based cogeneration plant at Matli: techno-commercial feasibility, engineering, vendor selection and contract management.
- Conducted comparative technical and commercial evaluation of proposals for 2 × 10 MW run-of-river hydro projects (Rohri and Nara Canal) and 2 × 20 MW solar projects (Thatta and Sukkur).
- Coordinated technical and legal reviews and regulatory engagement (NEPRA, AEDB, EPA, SSGC, DISCOs, NTDC) for project agreements, licences and permissions.

Manager (Projects) | K-Electric Ltd. *Jan 2015 – Mar 2017*

- Lead mechanical engineer representing the owner for the S&K Phase-II combined cycle conversion — a US$55 million EPC project converting two 90 MW open cycle plants to combined cycle by adding 32 WHRSGs of 1.625 tph each at each station (one on every engine exhaust) and one 10 MW steam turbine at each station, with main and bypass steam systems; covered design, installation and commissioning.
- Conducted detailed mechanical and process design reviews including HMBD, P&IDs, plant layout, isometrics and piping plans; verified erection and commissioning of steam turbines, condenser, WHRSGs and balance of plant against contract quality and performance requirements.
- Project scheduling and progress analysis in Primavera P6, highlighting lags and proposing time-recovery measures.
- Decommissioning of 4 × GE Frame-5 gas turbines for onward preservation, transportation and safe storage.

Deputy Manager (Mechanical) | K-Electric Ltd. *May 2010 – Dec 2014*

- Supervised and managed the 30,000-hour minor overhauls of Jenbacher gas engines at the 200 MW SGTPS & KGTPS stations, including spare parts planning and management.
- Plant team lead for SAP PM implementation: established functional locations, equipment hierarchy, maintenance planning, work orders and work permits in the SAP PM module.

- Maintenance engineering for plant auxiliaries — compressors, pumps and heat exchangers — covering troubleshooting, preventive and corrective maintenance; planned outages and managed plant inventory and budget.

EDUCATION

- M.E. Engineering (Energy Systems) — NED University of Engineering & Technology, Karachi, Dec 2012
- B.E. Mechanical Engineering — NED University of Engineering & Technology, Karachi, Dec 2009 (First Division)

TRAININGS & CERTIFICATIONS

- Asset Management System ISO 55001:2014 — Bureau Veritas
- Condition Based Maintenance — SKF Pakistan
- AWS Certified AI Practitioner
- Maintenance Management — HIPPOCAMPUS Industrial Training & Consulting
- GT Engine Boroscopic Inspection — PIA Engine Overhaul Shop
- Risk-Based Process Safety Management — URS Technical Advisory Group
- Certificate in Project Management — AUC Technologies
- NEPRA Power Safety Code — K-Electric HSE

PROFESSIONAL MEMBERSHIPS

- Chartered Engineer, Member of IMechE (UK) — Membership No. 80537723
- Registered Engineer, Pakistan Engineering Council — Reg. No. MECH/24880
- Member, International Register of Professional Engineers (UK Section)

TECHNICAL TOOLS

SAP PM • MS Dynamics AX • Primavera P6 • Microsoft Project • AutoCAD • Microsoft Office (incl. Advanced Excel)

References shall be furnished on request.