

BRIAN MUSHIMBA, PH.D., MBA

Liberty Utilities (602 S Joplin Ave, Joplin, MO 64801)

20+yrs of electric operations experience covering both **renewables and thermal power generation** of different configurations.

SOME TRANSFERABLE SKILLS

- Instrumentation & Controls Expert (I&C)
- Root cause Analysis (RCA)/Reliability Engineering
- Failure Mode and Effects Analysis (FMEA)
- FERC/NERC Compliance Management
- GADS Reporting & Incident Management
- CMMS plant operations management

RELEVANT EMPLOYMENT HISTORY

- 2020- Present: **Liberty, Joplin, MO, USA**
- 2016- 2020: **Ph.D. Student & Researcher**
- 2013-2016: **Eskom – Sub-Sahara Africa, Africa**
- 2012-2013: **Pratt & Whitney Power Systems – Hartford, CT, USA**
- 2006-2012: **Lafarge North America – Atlanta, GA, USA**
- 2000-2006: **Siemens Power Generation – Alpharetta, GA, USA**

PROFESSIONAL EXPERIENCE

Liberty – Joplin, MO, USA

Senior Director, Electric Operations of Central Region, USA, 2020 - Present

Responsible for managing all generation assets for Liberty in the Central Region of the USA. The generation fleet under my supervision comprise of two (2) large coal fired plants (jointly owned), two (2) combined cycle natural gas fired plants, One (1) dual-fuel peaking unit, One (1) hydro power station, one (1) solar power station and three (3) wind farms with a total nameplate generation in excess of 4,000MWs.

University of Zambia – Lusaka, Zambia

Ph.D. Student & Researcher 2016 - 2020

Conducted decarbonation studies, utilization of carbon-neutral energy sources in pyroprocessing in power generation.

Eskom – Megawatt Park, Johannesburg, South Africa

Technical Director, 2013 – 2016

Responsible for directing and controlling all electric operations and Maintenance (O&M) activities for the assigned region as well as execute the capital projects program in order to meet commercial and contractual obligations. The bulk of the work centered around developing and adopting O&M best practices in order to improve electric operations performance and also execute several multi-million-dollar Capital Projects for effective electric division performance in accordance with all contractual obligations (Power pools, markets). Eskom is the largest electricity supplier on the on the African continent.

Pratt & Whitney Power Systems – Hartford, CT, USA

Project Manager & Construction site lead, 2012 to 2013

Responsible for the strategic planning, project management and control, detailed design, procurement and delivery of a multi-million dollar EPC cogeneration project to supply a dual fuel gas turbine and Balance of Plant (BOP) equipment and processes (HRSG, NH3 skid, Absorption chillers, Gas compressors and Gas heaters) for a cogen project for a key customer in the North East to **supply 64MW of electricity & 140,000 pounds of steam per hour and hot air to two paper machines.**

Lafarge North America: Atlanta, GA

Plant Maintenance & Engineering Manager, 2006 to 2012

Responsible for a turn-around plan of badly performing plant assets in the region and developed the technical teams in maintenance and operations excellence (MOE). Responsible for ALL engineering disciplines and tasked with safely maximizing plant manufacturing equipment reliability and availability, minimizing emergency breakdowns, maximizing mean-time-between-failures (MTBF) and ensuring that equipment performed at/or close to rated capacities.

Siemens Power Generation – Atlanta, GA, USA

Electrical Controls Engineer, 2000 to 2006

As a **Turbine Controls commissioning engineer**, was responsible for preparation of electrical and control system designs for fossil fuel power generation projects. Responsible for process control specifications, field mounted electrical instrumentation specifications, electrical instrument summary schedules and commissioning/checkout documentation. Responsible for loop diagrams, schematic diagrams, wiring diagrams, arrangement diagrams and installation diagrams. Responsible for DCS (**TXP, T3000, Ovation**) plant control system configuration, check out, plant commissioning and startup.

EDUCATION

Ph.D., Environmental Engineering (Decarbonation), University of Zambia, Lusaka, Zambia

MBA, Business Administration, Salem University, Salem, WV

Graduate Level Training, Electrical Engineering Technology Courses, Pittsburg State University, Pittsburg, KS

Bachelor's Degree, Mining Engineering, University of Arizona, Tucson, AZ

AFFILIATIONS

Member, Project Management Institute (PMI)

Member, International Society of Automation (ISA)

Member, Society of Maintenance and Reliability Practitioners (SMRP)

CERTIFICATIONS & PUBLICATION

Project Management Professional (PMP:2006-2016); Project management Institute (PMI)

Certified Project Manager, Siemens, 2006 (**PM@Siemens**)

Passed Fundamentals of Engineering Exam, State of Arizona (FE/EIT), 2000-present

End
