

Engr. Haider Javed

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BIO DATA

Nationality	Pakistan
D.O.B	December 28, 1995
CNIC	35201-2898492-9
Profession	Electrical Engineer
Specialization	Solar / Hydro – Power
Pass Out Year	2018
Overall Experience	5 Years
Current Organization & Position	NESPAK - Grade 08 (a) – Due 09

Education and Professional Status

- HSSC (Pre-Engineering) from Punjab Group of Colleges with **913/1100 marks (83%)**.
- B.Sc. Electrical Engineering from University of the Punjab with **3.38/4.00 CGPA**
- Registered with Pakistan Engineering Council **#ELECT/76813 (Registered Engineer)**
- Member of Institute of Electrical and Electronics Engineers **(IEEE-94844285)**
- Honorary Member of American Society of Mechanical Engineers **(ASME-103380132)**
- Honorary member of Pakistan Engineering Council for YEDC.

Training and Certifications

1. Training on "Background and Historical Perspective on Tarbela Dam" (1-C.P.D.)
2. Short Course (O.S.H.A.), OCCUPATIONAL HEALTH, SAFETY and ENVIRONMENT (C.P.D.)
3. Professional Training on "Basic Concepts of Grid Interconnection Studies"
4. (1-C.P.D.)
5. Professional Training on "Basics of Technical Report Writing" (1-C.P.D.)
6. Training on "The Sustainable Power Bridge"
7. Professional Training on M&E for social sector projects.
8. Professional Training on "Technical Considerations for Design & Development of High Voltage substations of Hydropower Projects"
9. Certified Solar Engineer for: (University of Engineering & Technology)
 - a. Solar system feasibility report and payback period
 - b. Introduction to PV system and solar cells
 - c. Sun path, tilt angle and shading analysis
 - d. Working way of solar system and its components
 - e. Stand alone, Grid tied and Hybrid systems
 - f. Working of Inverter, panels, junction box, diodes and charge controller
 - g. Panels Mounting mechanism and design factor for solar structure
 - h. Inverter, Battery, PV Module, Charge controller and Structure sizing
 - i. Selection of Fuses and Protection of String
 - j. Protection of arrays, inverter, transformer and grounding of PV system
 - k. Types of Bus bars in PV System and Selection of Bus bars

10. Training on "Introduction to Solar Energy and Radiations" (1-C.P.D.)
11. Training on "Construction Management of 220kV & 500kV Projects"
12. Professional Training on "Setting the Perspective: Transition to competitive whole sale market for Renewables" (CPD)
13. Professional Training on "Energy Efficiency as a Resource for Renewables" (1-C.P.D.)

Experience Record

Organization: National Engineering Services Pakistan (Government of Pakistan Enterprise)

Project Title: 2000 Public Sector buildings Solarization

Position: Assistant Project Manager

Date: January, 2023 till Date (On Going)

Working:

- Designed and prepared 180+ reports on different Public Sector Buildings.
- Prepared Simulations on Glint and Glare basis for top priority sites.
- Prepared Financial analysis and optimized solutions for 180+ sites.
- Surveyed high profile sites for Solar PV design and installation.
- Prepared technical specifications and Plant Specific Data for each site.

Organization: NESPAK (Government of Pakistan Enterprise)

Project Title: Feasibility Study CRBC Solar Supplementation (90 MW)

Position: Junior Design Engineer

Date: July, 2022 till December, 2022 (On Going)

Working:

- Designed project layout with complete aspects on AUTOCAD incorporating details like, area, ground coverage ratio, inter row spacing, row pitch, tilt angle, azimuth calculations with correction factor, String to string spacing.
- Prepared simulations on PV Syst on the basis of three different resource datasets i.e. NASA, PV GIS, and Meteonorm.
- Prepared detailed feasibility document incorporating all the design, technology comparisons, energy efficient and cost optimized solutions.
- Calculated and prepared electrical layout of cables, inverters, combiner boxes, fuses, bus bars, 11 kV feeders.

Organization: NESPAK (Government of Pakistan Enterprise)

Project Title: Punjab Green Development Program by PEECA (6 MW)

Position: Junior Design Engineer

Date: April, 2022 till Date

Working:

- Worked as monitoring and evaluation expert for "Solarization and Retrofitting of Public Institute under PGDP" PEECA. Cumulative capacity of around ~6MW.
- Surveyed and inspected for Six DHQ Hospitals.
- Validated 8 Milestones of the project includes:
 - Design Approval
 - Site preparation (clearance of roof, Civil work for PV Mounting Structure, Roof Insulating Paint)
 - Submission of Purchase Order and Shipment Documents of PV Modules.
 - Submission of Purchase Order and Shipment Documents of Inverter

- Supply and Installation of PV Mounting Structure 5%
- Supply of all the material (LED & Fans) at site and 6 submission of approved sample test reports (Old & 10% New)
- Supply of Solar Modules at site and submission of approved sample test reports.
- Supply of inverter, AC Cable, DC Cable and Completion of AC, DC Earthing, lightning arrestors.
- Safe disposal of all non-conventional item(s)
- Complete installation and commissioning of solar sites, completion of control room equipment, security cameras, real time site & online monitoring access.
- Submission of Net Metering Application to DISCO as per NEPRA rules.

Organization: NESPAK (Government of Pakistan Enterprise)

Project Title: Solar Road Lights for Punjab Ring Road Authority (Northern Loop)

Position: Junior Design Engineer

Date: April, 2022 to May, 2022 (Assignment for Initial Feasibility Completed)

Working:

- Prepared feasibility studies for the Punjab Ring Road Authority on the solarization of Street lights of Northern loop.
- Proposed appropriate street lights for the client in compliance with the Public Procurement Regulatory Authority and viz a viz international standards.
- Proposed three different solutions for the solarization of the Road lights to reduce the burden on PRRA in the name of electricity costs.

Organization: MM Pakistan Pvt Ltd.

Project Title: Tarbela 5th Extension Project - Floating Solar Component (300 MW)

Position: Junior Design Engineer – Floating Solar

Date: February, 2020 to March 2022

Working:

- Assisted in the preparation of Feasibility Studies for 300 MW Floating Solar Project at three different proposed locations at Tarbela 5th Extension project.
- Assisted in the foundation study for the anchoring and mooring of the floating structures.
- Assisted in the Feasibility study pertinent to Propeller type foundations for the Floating unique structures.
- Studied and proposed different floating structures and platforms e.g. GI Rafts, Plastic Rafts, Self-weighted anchors.
- Assisted principal engineer in preparation of conceptual drawings for 132kV/220kV/500kV transmission network and interconnectors.
- Assisted principal engineer in preparation of 132kV switchyard section drawings.
- Supervised the contract for procurement and installation of weather station (Pyranometer and Allied Components) for design basis report and submitted the technical report on the complete process.
- Calculated performance ratio, efficiencies, LCOE, CAPEX, OPEX, AC/DC power losses, and other FS parameters.
- Coordinated with the international solar design experts efficiently and executed the assignment in decided timeframes.
- Assisted Senior Engineer in several surveys for the transmission line plan.

- Monitored data from weather station and used for designing the optimum parameters.

Organization: MM Pakistan Pvt Ltd.

Project Title: Tarbela 5th Extension Hydro Power Project **(1530 MW)**

Position: Junior Engineer – Electrical

Date: November, 2019 to March 2022

Working:

- Assisted in the preparation of project schedule with detailed site activities scheduling and resource planning.
- Assisted Senior E&M and Contracts engineer in the preparation of evaluation report for Pre- Qualification of E&M Bidders.
- Assisted in bid evaluation process for the preparation of bidding documents and prepared comparative statements of bidders, bid evaluation forms, efficiency loading charts, reviewing technical specifications, incorporated clarifications, and reviewing functional guarantees.
- Assisted Deputy Project Manager in preparation of MOM for Pre-Award and Kick-Off meetings.
- Assisted Deputy Design Engineer Transmission Line in the preparation of tender drawings for 500kV Switchyard, Transmission and Evacuation plan for 500kV line, protection
- scheme for 500kV/220kV/132kV transmission and distribution.

Organization: MM Pakistan Pvt Ltd.

Project Title: Towers and Cables Inspection of Sukhi Kinari HPP **(870 MW)**

Position: Junior Engineer – Electrical

Date: March 2019 – December 2019

Working:

- Inspected HT/LT poles and towers including cross arms under supervision of Senior E&M Engineer.
- Supervised Galvanizing tests, Tensile and yield tests for towers and cross arms.
- Supervised Short circuit and insulation tests for HV/LV Al/Cu cables.

Organization: MM Pakistan Pvt Ltd.

Project Title: Feasibility studies of Chowkel Khwar Hydro Power Project **(60 MW)**

Position: Junior Engineer – Electrical

Date: February 2019 – June 2019

Working:

- Prepared design documents for E&M and Transmission Studies.
- Prepared site cascade studies and “One line” power flow diagram.
- Designed Single Line Diagram for Switchyard and other relevant Drawings.
- Assisted in general layout schemes.
- Surveyed and prepared schematic layouts for 132kV transmission line viz a viz that terrain.
- Prepared monthly/quarterly/ and Annual progress reports.
- Managed document control at feasibility stage of the project under the supervision of Principal Engineer.
- Engineering Procurement report for the CKHPP Project.

- Prepared BOQ for Electrical and Power House equipment.
- Assisted for the Optimization of the Plant Factor and assisted in optimizing the EIRR for CKHPP.

Organization: Pakistan Railways

Department: Power House and Auxiliaries

Position: Support Engineer (Technical)

Date: March 2018 – January 2019

Working:

- Working on the effective power distribution and their priorities under the policy of Pakistan Railways
- Power Distribution Management (Scheduling and maintaining minimum load shed)
- Completely analyzing the power devices
- Working of Series, Shunt and Compound motors, practically installed in locomotives and at workshops
- Understanding the concepts of different types of windings of motors.
- Developed logics for the embedded systems installed in the power vans of latest locomotives.

Organization: Bulleh Shah Packaging

Department: Electrical and Instrumentation Department

Position: Intern Engineer

Date: June 2017 – August 2017

Working:

- Learnt Single Input Type Data Loggers that are designed to measure one specific parameter such as temperature or voltage.
- Universal Input Loggers with the flexibility to monitor multiple signal types simultaneously.
- Worked on the Digital Control Systems.
- Learning complete working structures of big industries.
- Learning key concepts and major indicators related to a process industry.

Achievements and Professional Projects

- Achieved First Prize in All Pakistan Innovation Award at the International Pakistan Auto Show 2018, and a cash prize of 100,000/-, held at expo center Lahore.
- Achieved First Prize in national project exhibition by IEEE, 2016.
- Completed my internship with EXCELLENT marking from Bulleh Shah Packaging Limited.
- Design a solution and prepared feasibility project for Bulleh Shah Packages for their motor's protection and automation.
- Designed Automatic WAPDA to Solar Hybrid System.
- Designed Library Management System (Visual Studio).
- Advance Security System using laser protection and password entry.
- Door Automation Module using Arduino Nano via Bluetooth/Wi-Fi and a secure android Application.
- Smart Room using Arduino Nano & Bluetooth mobile application.
- Smart Class Rooms with full control over touch screen with wireless communication.

- Smart & Secured Homes using At-Mega328 with touch screen interface having full control over appliances and 360° IR Blaster for Television and Air Conditioner control using a Wi-Fi mobile application.

Worked with Major Organization (Employer/Client/Assignment)

 MM Pakistan (Pvt) Ltd.					
					

Technical Softwares

MS OFFICE	PV SYST	HELIOSCOPE
		
Open Solar	Python	MC's/Scripting/Coding
		

Language's Proficiency

Language	Writing	Reading	Speaking
Urdu	Fluent	Fluent	Fluent
English	Fluent	Fluent	Fluent
Chinese	HSK-1	HSK-1	HSK-1