

# Your Trusted Partner in the Power & Energy Industry

Great Western Energy Limited provides innovative engineering solutions in Canada and Bangladesh.

GWEL is promoted by a group of professionals who are highly experienced and renowned in the Power, Oil & Gas Sectors. In Power Generation field GWEL has been a popular name within a short time.

GWEL always provide Cost effective and reliable solutions which suit our customer needs.



**GREATWESTERN ENERGY**

[www.greatwesternenergyLtd.com](http://www.greatwesternenergyLtd.com)



**GREATWESTERN ENERGY**



## Design, Procurement, Installation & Commissioning of Gas Pressure Regulating & Metering Station (RMS)

- Pressure reduction metering station (industrial gas) is a regulator station specially designed for industrial users, including gas power plant (gas turbine, gas boiler and other gas supply facilities), fertilizer plant, ceramic plant, glass factory and other enterprises. It is a gas supply equipment to industrial users after gas filtering, regulating and metering.

### Repair and maintenance with Spare Parts supply

- ✓ Fuel Gas Conditions & Metering Skids
- ✓ Ultrasonic/Turbine/RPD based Metering Skids
- ✓ Filter Separator/ Coal Escer
- ✓ Thermal Oil Heater/ Heat Exchanger
- ✓ Fuel Firing System (For Oil & Gas Burner)
- ✓ Pressure Vessels / Condensate Tank
- ✓ Turbine /RPD Meter
- ✓ Pressure Transmitter (PT)
- ✓ Temperature Transmitter (TT)
- ✓ Flow Computer with Online UPS
- ✓ Pressure regulators (pilot controlled and traditional)



**Great Western Energy (BD) Ltd. is the Business Partner of Autometers Energitec Ltd.**



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## **Design, Procurement, Installation & Commissioning of Gas Distribution and Gas Compressing System**

- GWEL is currently providing solutions for Oil & Gas Industries in Canada. Its solutions for Gas compression and Gas Distribution scopes include but not limited to Separators, booster and main Compressors, Vane Type Moisture Eliminator (VME) Blow down and Venting System

### **Repair and maintenance with Spare Parts supply**

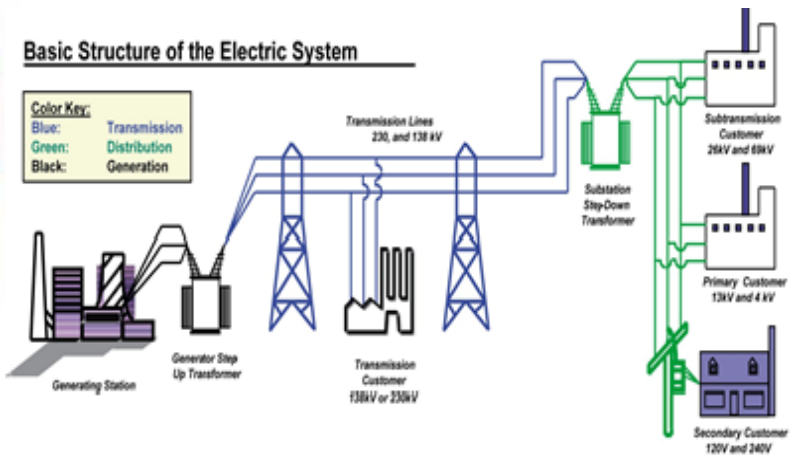
- ✓ Piping, skid, measurement system
- ✓ Instrumentation and control system
- ✓ Slam Shut off Valve, Relief valve, glove and ball valves, safety, control and blowdown valves, Pilot control and self controlled emergency shut down system
- ✓ Level transmitter, level gauge, flow control system for the separator and tanks
- ✓ Pressure transmitter, Temperature transmitter for the distribution and compression VME, relief and venting systems
- ✓ Cathodic Protection (CP) , Grounding and Earthing system for the equipment, skid, steel piping, Motor operated valve and Motor Control Center (MCC)
- ✓ Pneumatic and compressed air control system
- ✓ SCADA and Radio- control system

**Great Western Energy Ltd** has achieved Permit to Practice from **Association of Professional Engineers and Geoscientists Alberta (APEGA)**, Canada.



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### Basic Structure of the Electric System



## Power System Engineering:

- ✓ Collect critical data and information to develop project specific design and System Planning
- ✓ Create System modelling and Power System Analysis – load flow, short circuit, power quality and PF correction and System Reliabilities etc.
- ✓ Grounding system study, ground grid and Lightning
- ✓ Substation equipment specification, supply and procurement supports.
- ✓ Complete system design, installation, testing and commissioning for AIS/GIS (HV/MV) substations; Plant Engineering; power generation and solar power.
- ✓ MV/LV Distribution system design in conjunction with switchgear, MCC, VFD, Starters, motors, PLC/DCS related to plant/process industries.

**We Provide engineering Design, Procurement, Installation, Operation and Maintenance of any electrical system and infrastructures**

**Great Western Energy Ltd. Doing projects as JV partner with World's renowned EPCMs**



**GREATWESTERN ENERGY**



**Repairing Scope : Motors / Generator / Alternators / DC Motor**

**✓AC Motors/Generators/Alternators):**

Rewinding and repairing of Rotating Machines-Electrical and Mechanical as per National and International Standards with world class facilities in India. Rewinding and Repairing of all AC induction motors from FHP to 20000HP, Voltage up to 13.8KV, Rewinding and repairing of all Generators /Alternators up to 210MW.

**✓DC motors :**

We are capable to repair DC motor (armature winding) & Commutator replacement

**✓Preventive Maintenance and Mechanical Repairing :**

We offer Overhauling services for all rotating machines at our works and In-situ as per client requirements.



Great Western Energy (BD) Ltd. is the Channel Partner of Indian Engineering Company



**GREATWESTERN ENERGY**



**We are capable to provide these Services :**

- ✓ Rewinding & repairing of all types of Motors & Generators.
- ✓ Manufacturing and supply of coils.
- ✓ Wound Rotor Motors, Vertical Motors
- ✓ Rewinding with Resin rich Insulation & poor Insulation (VPI)
- ✓ Re-barring/ Re-caging of all types of Rotors
- ✓ Synchronous Generator Repair & rotor Impedance Testing
- ✓ Customized design to comply with VFD drives
- ✓ Stator core Restacking and Recoating
- ✓ Dielectric testing, Surge Testing, Hi-Potential Test ;

**All tests are performed in accordance with International Standards.**



**Great Western Energy (BD) Ltd. is the Channel Partner of Indian Engineering Company**



**GREATWESTERN ENERGY**



**Supply, Installation & Testing of HV and MV Equipment with different capacities rated for 11kV to 230KV systems.**

- ✓ Power Transformer, and Current Transformer
- ✓ Potential (IVT/CVT) Transformer, Surge Arrester
- ✓ Disconnecting Switch (with ES / without ES)
- ✓ Vacuum/SF<sub>6</sub>/Oil Circuit Breakers
- ✓ Ground grid, Bus, duck, power and control cables,
- ✓ AC, DC, UPS and battery systems in the substation
- ✓ Relay control panels and control houses,.
- ✓ P&C systems, security and communications panels.



**SUMEC**  
SUMEC COMPLETE EQUIPMENT & ENGINEERING CO., LTD.

**Great Western Energy (BD) Ltd. is the Authorized Channel Partner of SUMEC, China**



**GREATWESTERN ENERGY**



### Testing of Transformer

- ✓ Polarity & Magnetic Balance Test
- ✓ Insulation Resistance Test
- ✓ Winding Resistance Test
- ✓ Tan-delta with Capacitance Test
- ✓ Turn Ratio Test

### Testing of Current & Potential Transformer

- ✓ Polarity Test
- ✓ Turn Ratio with Burden
- ✓ Accuracy Test

### Other Testing Services

- ✓ Control & Relay Panel
- ✓ All kinds of Switchgear Panel
- ✓ Leak Detection of SF6 Breaker



**Great Western Energy (BD) Ltd.** has highly skilled technical Experts with all kinds of sophisticated & Calibrated Testing Equipment



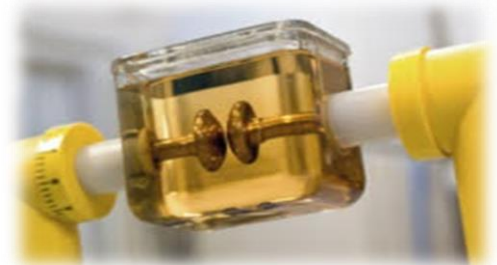


**GREATWESTERN ENERGY**



### Our Specialized Services :

- ✓ Transformer Oil Filling, Filtering/Centrifuging & BDV Testing (In-Service /Out-of-Service)
- ✓ Service & Maintenance of Power & Auxiliary Transformers
- ✓ Supply, Charging & Discharging of 110V DC Battery Bank
- ✓ Cable Laying, Termination with supply of Cable Trench
- ✓ Leak detection & Gas filling of SF6 Circuit Breakers
- ✓ Authorized Electrical wiring inspector under DPDC.



**Great Western Energy (BD) Ltd.** has highly skilled technical Expert with all kinds of sophisticated & Calibrated Testing Equipment



**GREATWESTERN ENERGY**



## Great Western Energy (BD) Limited

[www.gwel-bd.com](http://www.gwel-bd.com)

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