

# COMPETENCY PROFILE

Technician - BOP - Wind

A Report By



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Competency Management System

Position Name : **Technician OP Wind**

#### Position Details

Job Title	Technician - BOP - Wind	Grade/ Level	Technician - BOP
Business	Wind O M	Function	Wind
Location			

#### Competencies Required

##### Technical

Competencies	Required Level	Criticality
Transformer / IDT	Level 1-Novice	Critical C
Sub Station / Switchyard	Level 1-Novice	Critical C
Cable Management	Level 1-Novice	Critical C
Wind Power Plant Technology	Level 1-Novice	Important I
Control System Architecture and SCADA	Level 1-Novice	Important I
Weather Monitoring System	Level 1-Novice	Important I
Plant Performance	Level 1-Novice	Important I
Transmission Lines and Grid	Level 1-Novice	Important I

##### Cross Functional

Competencies	Required Level	Criticality
Safety	Level 2-Practitioner	Critical C
ISO Standards	Level 1-Novice	Important I
ESG Initiatives	Level 1-Novice	Important I
Knowledge of SAP PM MM Module	Level 1-Novice	Important I

Transformer / IDT

Level 1-Novice

Criticality:Critical C

#### Level Indicators

- Transformer specifications circuit diagrams SLD GTP Data
- Transformer testing Faults errors and rectification as per OEM guidelines
- Codes standards for all the transformers in the plant
- Preventive predictive breakdown maintenance of the transformers
- Troubleshooting of the transformers relay coordination fault identification
- Physical inspection of the transformers as per the check list/ SOP
- Fire Alarm detection and protection system of the transformers
- NIFPS system operations maintenance troubleshooting

## Sub Station / Switchyard

Level 1-Novice

Criticality:Critical C

### Level Indicators

- SubStation and Switchyard Equipments HT/LT Panels, CRP Panels, Battery system, Aux. Supply system specification, circuit diagrams, SLD
- Errors testing operations applicable codes standards
- Relay settings configuration coordination and calibration
- Parameters / Alarm monitoring of applicable relays
- SS/ Switchyard components testing Faults errors identification and rectification / SOP
- Isolation and normalization of feeders / sections by following the SOP/ PTW system
- Safety PPE/ Tools applicable for such operations
- Preventive predictive and breakdown maintenance
- Physical inspection of the SS/ Switchyard as per the check list/ SOP
- Fire Alarm, detection and protection system of the SS/ Switchyard
- Earthing system

## Cable Management

Level 1-Novice

Criticality:Critical C

### Level Indicators

- Power cable types specs, control communication OPGW
- Cable laying and testing
- Methods of Cable identifying / tagging systems accordance to SLD
- Cable jointing termination for Power Control and OFC cables
- Error codes and error / fault clearing methods
- Cable insulation and earthing
- Preventive predictive and breakdown maintenance of cables
- Maintenance of cable trays and cable routes route marker

## Wind Power Plant Technology

Level 1-Novice

Criticality:Important I

### Level Indicators

- Understanding SLD of the Wind Power Plant
- Components of Wind Power Plant
- Definition/Name Plate details of all the components
- Synergy integration of the components
- Knowledge of Lightning protection system

## Control System Architecture and SCADA

Level 1-Novice

Criticality:Important I

### Level Indicators

- SCADA architecture and components
- RTUs, PPC, PLCs, PCs, HMIs, servers, switches, firewall, Gateway, FOTE communication, CITET config.
- Testing, operations, rectification, monitoring these components and Hardware
- Data monitoring, transmission to the control centres ensuring the 24X7 availability at SCADA.
- Protection and escalation of possible cyber-attacks and breaches, prepared with emergency response
- Preventive checks as per OEM and knowledge of trouble shooting, bugs and issues
- Connectivity RF/Broadband/ILL/MPLS/PLCC trouble shooting, cable slicing

## Weather Monitoring System

Level 1-Novice

Criticality:Important I

### Level Indicators

- Weather Factors influencing the Wind Plant
- Geographic Location- Latitude Longitude Time Regional Weather and Microclimatic factors
- WMStype configurations troubleshooting IOT Apps
- Meteo Station and weather forecasting systems
- Sensors and data logging system



## Plant Performance

Level 1-Novice

Criticality:Important I

### Level Indicators

- Data Visualisation - Parameters to be monitored for Performance
- Data Visualisation - Monitoring the parameters from SCADA systems
- Data Visualisation - Monitoring systems Power BI DSM F S
- Data Analytics - CUF Bridge PR Bridge Loss diagram repeated errors Loss reduction report generation and transmission loss Plant availability Grid availability

## Transmission Lines and Grid

Level 1-Novice

Criticality:Important I

### Level Indicators

- Grid operation and coordination
- Compliance with Grid codes
- Coordination with SLDC/RLDC SECI
- Transmission Line patrolling
- Troubleshooting methods in Transmission systems
- Coordination for Line Shutdowns
- Type of insulators condition monitoring relays operations
- Insulators rectification/ replacement procedures

## Safety

Level 2-Practitioner

Criticality:Critical C

### Level Indicators

- HIRA / JSA preparation as per the Company Safety Policy OEM Guidelines
- Safety Guidelines awareness applicable for Power Plant - Wind
- Wind - Disaster / Emergency Management Plan Knowledge preparation
- Wind - Accident possibilities Identification of Disaster-prone Areas prevention
- Wind - Fire Detection Control Process thoroughness Fire Fighting System knowledge
- Wind - Encourage drive safety culture for all the team members
- Mock drills
- PTW Systems
- Wind - PPE / safety items / equipment's identification applicability
- Crane operations - procedure

ISO Standards

Level 1-Novice

Criticality:Important I

#### Level Indicators

- Awareness adherence to define process

ESG Initiatives

Level 1-Novice

Criticality:Important I

Level Indicators

- Awareness adherence to define process

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