

€ TRAINING

Shutdown Maintenance Management for
Electric Power Plants





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Introduction:

This training program is designed to equip participants with essential skills and strategies for effectively managing shutdown maintenance activities in power plants. It empowers them to implement best practices that minimize downtime and maximize plant efficiency.

Program Objectives:

By the end of this program, participants will be able to:

- Understand the importance of shutdown maintenance in power plant operations.
- Gain proficiency in planning and scheduling maintenance shutdowns.
- Learn techniques for resource allocation and coordination during shutdowns.
- Develop skills in risk assessment and mitigation specific to shutdown activities.
- Implement strategies for improving shutdown efficiency and effectiveness.

Target Audience:

- Maintenance managers and supervisors in power generation facilities.
- Plant engineers and operations personnel involved in maintenance planning.
- Technicians and specialists responsible for executing shutdown maintenance.
- Safety and compliance officers overseeing maintenance activities.
- Professionals seeking to enhance their knowledge of shutdown maintenance in power plants.

Program Outline:

Unit 1:

Overview of Shutdown Maintenance:

- Importance of Shutdown Maintenance in Power Plants.
- Types of Shutdowns: Planned, Unplanned, and Forced.
- Regulatory Requirements and Safety Considerations.

- Challenges and Risks Associated with Shutdown Activities.
- Key Performance Indicators KPIs for Shutdown Maintenance.

Unit 2:

Planning and Scheduling Shutdowns:

- Strategic Planning for Maintenance Shutdowns.
- Development of Shutdown Plans and Procedures.
- Scope Definition and Work Breakdown Structure WBS.
- Resource Allocation and Procurement Planning.
- Coordination with Operations and Stakeholders.

Unit 3:

Execution and Management of Shutdowns:

- Execution Phases: Pre-shutdown, Shutdown, and Post-shutdown.
- Roles and Responsibilities during Shutdown Activities.
- Monitoring Progress and Milestones.
- Communication and Reporting during Shutdowns.
- Managing Change and Unexpected Challenges.

Unit 4:

Risk Assessment and Mitigation:

- Identification of Risks and Hazards during Shutdowns.
- Risk Assessment Techniques: HAZOP, FMEA.
- Implementation of Mitigation Measures.
- Emergency Response and Contingency Planning.
- Lessons Learned and Continuous Improvement.

Unit 5:

Optimizing Shutdown Efficiency:

- Performance Evaluation and Analysis of Shutdowns.
- Metrics for Measuring Shutdown Performance.
- Root Cause Analysis RCA for Shutdown Issues.
- Implementing Best Practices for Efficiency Gains.
- Future Trends in Shutdown Maintenance for Power Plants.