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COURSE BROCHURE

Power and Water Transmission Upkeep and Cost Control Training Course

22 – 26 March 2027
Singapore

Power and Water Transmission Upkeep and Cost Control Training Course

Ref: 3219_122469 **Date:** 22 – 26 March 2027 **Location:** Singapore **Fees:** 9300 GBP

Power and Water Transmission Upkeep and Cost Control Training Course is a 1-week training course for utility operations, maintenance and asset cost staff, built around an asset upkeep and cost tracking plan. Ageing lines, pumping mains and substations now compete for the same limited maintenance budgets, so every inspection, repair and replacement has to earn its place. Jupiter Prime Training runs this course for people who keep transmission assets in service at a known cost.

Why Power and Water Transmission Upkeep and Cost Control Matters Now

Three forces shape this subject today. Combined utilities run overhead lines, cables, trunk mains and pumping stations side by side, so outages in one network ripple into the other. Finance teams and boards ask why maintenance spending rises while asset condition stays flat. An organisation that handles upkeep well defers replacement safely and explains every cost line; one that handles it badly pays for emergency repairs, lost water and avoidable supply interruptions. The course rests on condition-based maintenance, reliability-centred thinking and whole-life costing, each described in plain terms.

Who Gains Most from Power and Water Transmission Upkeep and Cost Control

- Specialists who schedule inspections and repairs on lines, cables, mains and pumping plant
- Supervisors who dispatch field crews and record work order completion
- Analysts who track operating and maintenance spending against budget lines
- Engineers who judge asset condition and propose refurbishment or replacement
- Coordinators who plan network outages and isolations across both utilities

A combined maintenance and finance group gains most when several members attend together, because they leave sharing one cost vocabulary and one view of asset priorities.

Power and Water Transmission Upkeep and Cost Control Capabilities

Participants connect the physical condition of transmission assets to the money spent keeping them in service.

- Assess the condition of conductors, cables, valves and pumps from inspection records — repair or replace decisions
- Build an asset register with criticality scores for both networks — maintenance planners
- Calculate whole-life cost for competing refurbishment options — budget holders
- Design preventive and condition-based maintenance schedules — field crew supervisors
- Track operating and maintenance cost flows by asset and activity — finance reviewers
- Communicate cost variances and deferral risks in plain language — senior leadership

Key Power and Water Transmission Upkeep and Cost Control Terms

- Asset criticality — a ranking of how severely an asset failure would affect supply, safety and cost.
- Condition-based maintenance — upkeep triggered by measured asset condition rather than by a fixed calendar interval.
- Whole-life cost — the total cost of owning an asset from purchase through operation, upkeep and final disposal.
- Non-revenue water — water put into the transmission network that is lost or never billed to a customer.
- Work order — a recorded instruction for a maintenance task, holding labour, materials, time and cost.
- Maintenance backlog — approved upkeep tasks not yet completed, often a sign of rising failure risk.

Power and Water Transmission Upkeep and Cost Control Day by Day

Day 1: Combined Network Assets and Their Pressures

- Transmission Line, Cable and Trunk Main Inventory — Scope of Upkeep Responsibility
- Substation and Pumping Station Interdependence — Shared Outage Risk
- Asset Ageing Profiles — Timing of Refurbishment Waves
- Failure Mode Catalogue for Both Networks — Inspection Focus Areas
- Stakeholder Map of Operations, Finance and Customers — Reporting Expectations

Day 2: Condition Assessment and Criticality

- Thermal Imaging and Line Patrol Records — Conductor and Joint Repair Priority
- Leak Detection and Pressure Logging — Main Rehabilitation Priority
- Pump Vibration and Efficiency Testing — Overhaul or Replace Choice
- Criticality Scoring Matrix — Ranking Assets Across Both Utilities
- Condition Grading Scale — Consistent Field Reporting Between Crews

Day 3: Maintenance Strategy and Scheduling

- Preventive Versus Condition-Based Intervals — Crew Time Allocation
- Reliability-Centred Task Selection — Which Failures Justify Upkeep
- Outage and Isolation Planning — Coordinating Power and Water Shutdowns
- Spares and Materials Stocking Levels — Repair Lead Time Control
- Maintenance Backlog Review — Deferral Risk Acceptance

Day 4: Operating and Maintenance Cost Flows

- Cost Breakdown by Asset, Activity and Crew — Budget Line Ownership
- Work Order Cost Capture — Accurate Labour and Materials Records
- Whole-Life Cost Comparison — Refurbish, Replace or Run to Failure
- Energy Use of Pumping and Network Losses — Operating Cost Reduction
- Cost Variance Dashboard — Monthly Spending Conversations With Finance

Day 5: Practising the Asset Upkeep and Cost Tracking Plan

- Criticality Results Applied to a Sample Network — Upkeep Priorities
- Schedule Built From Condition Grades — Annual Maintenance Calendar
- Whole-Life Cost Case for One Asset Group — Investment Request
- Peer Challenge of Cost and Risk Assumptions — Plan Credibility
- Asset Upkeep and Cost Tracking Plan — Completed Team Document

Applying Power and Water Transmission Upkeep and Cost Control After the Course

- Lead a criticality scoring session for one line corridor and one trunk main
- Set up a monthly cost variance review that links work order costs to each asset group's budget line

Power and Water Transmission Upkeep and Cost Control Questions FAQ

What is power and water transmission upkeep and cost control, and why does it matter now?

It is the practice of keeping lines, cables, mains and pumping plant in service while tracking what that upkeep costs. It matters now because ageing assets and tight budgets force utilities to justify every repair, deferral and replacement with evidence.

Which roles gain most from power and water transmission upkeep and cost control training?

Maintenance planners, field supervisors, asset engineers and cost analysts gain most. It suits anyone who links field work to finance.

How does power and water transmission upkeep and cost control differ from a power system protection course?

It focuses on asset condition, maintenance scheduling and cost tracking rather than relay settings or fault clearance.

What do you bring back from power and water transmission upkeep and cost control training?

You bring back a working plan that ranks assets by criticality, schedules their upkeep and tracks each cost flow. It supports the next maintenance budget.

Power and Water Transmission Upkeep and Cost Control: The Way Forward

The asset upkeep and cost tracking plan first informs which asset groups receive maintenance budget in the coming year. Maintenance planners, finance reviewers and asset engineers use it together to agree priorities and deferrals. After its first use, revisit the criticality scores against actual failures and costs.