MERCURY

Electric Utility Regulation, Tariff Design, and Market Reform Training Course

2 – 6 August 2027
London (UK)



Dubai - UAE: +971 4 450 5697
Istanbul - Türkiye: +90 539 599 1206
Amman - Jordan: +962 79 712 3347

Electric Utility Regulation, Tariff Design, and Market Reform Training Course

Ref: 48_1082682 **Date:** 2 – 6 August 2027 **Location:** London (UK) **Fees:** 5900 Euro

The Electric Utility Regulation, Tariff Design, and Market Reform Training Course is a one-week course for utility economists, tariff analysts, regulatory compliance managers, and power market planners responsible for tariff structuring and sector unbundling. Working with cost-of-service models, revenue requirement filings, and market trading rules, you assemble a Utility Regulation and Tariff Reform Dossier. Mercury Training Center delivers this course to develop technical expertise in modern power sector regulation.

About This Course

Shifting generation mixes, network expansion capital expenditures, and market unbundling create financial imbalances and regulatory compliance risks across power utilities. To follow this course, you must already understand basic utility accounting, standard power system asset categories, and foundational microeconomic principles. Through guided modeling exercises and regulatory case reviews, you practice revenue requirement calculation, tariff rate design, and market unbundling evaluations.

Who It Is For

- Tariff analysts responsible for building cost-of-service models, calculating revenue requirements, and apportioning network delivery expenses.
- Regulatory compliance managers responsible for preparing tariff rate filings, evaluating performance-based incentive mechanisms, and managing multi-year rate reviews.
- Power market specialists responsible for assessing wholesale market designs, dispatch clearing protocols, and bilateral contract settlement frameworks.
- Utility commercial planners responsible for designing retail rate structures, time-of-use schedules, and distributed energy resource interconnection charges.

This course is not for entry-level electrical technicians managing physical substation switchgear, who are better served by power system field maintenance training, nor is it for corporate financial accountants handling general tax filings, who would gain more from standard utility financial accounting coursework.

Dubai - UAE: +971 4 450 5697
Istanbul - Türkiye: +90 539 599 1206
Amman - Jordan: +962 79 712 3347

Competencies You Will Build

- Revenue Requirement Modeling: Calculating utility rate bases, weighted average costs of capital, and operating expense allowances under rate-of-return and performance-based regulation.
- Cost-of-Service Allocation: Classifying and allocating system capital expenditures and operational costs between functional power segments and customer classes.
- Retail Tariff Structuring: Designing volumetric energy rates, capacity demand charges, time-of-use schedules, and fixed network access fees.
- Market Reform Assessment: Evaluating vertical unbundling models, independent system operator structures, and wholesale power market clearing mechanisms.
- Incentive Regulation Design: Structuring multi-year price-cap and revenue-cap formulas with service quality indices and efficiency benchmarks.

What You Will Be Able to Do

By the end of the course you will be able to:

- From historical asset registries and operational expenditure ledgers, determine an adjusted regulatory asset base and multi-year revenue requirement using building block methodology.
- Using functionalized utility system costs, allocate common transmission and distribution network expenses across industrial, commercial, and residential customer classes under standard cost allocation principles.
- Given system load curves and marginal cost data, design multi-part retail tariffs incorporating fixed monthly charges, coincident peak demand fees, and time-differentiated energy rates.
- From power sector reform legislation and asset unbundling directives, structure separation pathways for generation, transmission, distribution, and commercial retail supply.
- Using wholesale bidding records and merit-order dispatch curves, evaluate uniform market-clearing price dynamics and bilateral contract settlement mechanisms.
- Given network reliability statistics and operational benchmarks, specify price-cap formulas that incorporate productivity factors and quality-of-service penalty regimes.

Course Content

Day 1: Principles of Economic Regulation and Revenue Requirements

- Economic Objectives of Utility Regulation and Natural Monopoly Market Failures
- Cost-of-Service Regulation Versus Performance-Based Incentive Mechanisms
- Building Block Approach and Regulatory Asset Base Valuation Methodologies
- Operating Expenditure Benchmarking and Allowed Working Capital Determination
- Cost of Capital Formulation Using Capital Asset Pricing Model and Debt Structuring

Dubai - UAE: +971 4 450 5697
Istanbul - Türkiye: +90 539 599 1206
Amman - Jordan: +962 79 712 3347

Day 2: Cost-of-Service Allocation and Network Costing

- Functional Classification of Generation, Transmission, and Distribution System Assets
- Embedded Cost Allocation Principles and Functional Cost Grouping
- Coincident Peak and Non-Coincident Peak Capacity Apportionment Methods
- Marginal Cost-of-Service Calculations for Long-Run Transmission Expansion
- Customer Class Demand Profiling and Cost-to-Serve Reconciliation

Day 3: Tariff Structuring, Rate Design, and Energy Transitions

- Two-Part and Three-Part Retail Tariff Architecture Design
- Time-of-Use and Dynamic Critical Peak Pricing Schedules for Load Shifting
- Standby Rates and Fixed Interconnection Charges for Commercial Rooftop Solar
- Decoupling Mechanisms and Revenue Balancing Accounts to Manage Volume Risk
- Cross-Subsidization Analysis and Low-Income Tariff Scheme Formulations

Day 4: Market Reform, Restructuring, and Wholesale Trading

- Vertical and Horizontal Unbundling of State-Owned and Investor-Owned Utilities
- Independent System Operator Roles and Open Access Transmission Rules
- Wholesale Day-Ahead and Real-Time Market Clearing via Locational Marginal Pricing
- Ancillary Service Market Structures for Frequency Regulation and Operating Reserves
- Bilateral Power Purchase Agreements and Contract for Differences Frameworks

Day 5: Regulatory Filings, Rate Case Simulation, and Dossier Finalization

- Exercise on Multi-Year Building Block Revenue Requirement Calculations
- Exercise on Fully Distributed Cost Allocation Across Commercial and Industrial Customers
- Exercise on Designing Peak-Coincident Demand Tariffs and Time-of-Use Energy Blocks
- Exercise on Structuring Transmission Use-of-System Charges and Congestion Relief
- Final Assembly and Validation of the Utility Regulation and Tariff Reform Dossier

Case Studies and Exercises

These suggested activities provide practical application of regulatory principles and tariff design methods across different utility operating environments:

Dubai - UAE: +971 4 450 5697
Istanbul - Türkiye: +90 539 599 1206
Amman - Jordan: +962 79 712 3347

- Case study: A municipal distribution network integrating high volumes of commercial solar installations, where you evaluate cost-shift impacts, recalculate customer class revenue requirements, and formulate fixed grid access tariffs.
- Case study: An industrial manufacturing zone seeking direct wholesale market access, where you assess open access transmission charges, design non-discriminatory wheeling rates, and balance system loss allocations.
- Exercise: A restructured transmission utility facing multi-year investment requirements, where you model regulated asset base additions, calibrate return on capital allowances, and construct transmission use-of-system pricing schedules.
- Exercise: A vertically integrated power utility transitioning to a competitive wholesale market, where you establish unbundled revenue separation tables, verify bilateral contract settlement flows, and test service reliability penalty formulas.

What You Take Back

The Utility Regulation and Tariff Reform Dossier provides calculation sheets, rate filing schedules, and regulatory impact models to guide your utility rate cases and market reform projects during your first month back at work. You will use it to audit revenue requirements, construct cost-reflective tariffs, and benchmark restructuring plans against established utility practices.

- Multi-year building block revenue requirement and regulatory asset base financial models
- Embedded and marginal cost allocation calculation templates for customer rate classification
- Retail tariff design spreadsheets featuring time-of-use schedules and demand charge estimators
- Utility unbundling checklists and wholesale power market transition evaluation matrices

Quick Answers FAQ

What background is required before attending the Electric Utility Regulation, Tariff Design, and Market Reform Training Course?

You need working familiarity with foundational power utility operations, standard financial statements, and basic spreadsheet analysis. Experience with utility rate filings, power distribution accounting, or energy sector planning helps you engage effectively with cost-of-service formulas and market restructuring exercises.

How does this course differ from general energy economics training?

General energy economics coursework focuses on macroeconomic energy policy, commodity fuel pricing, and global consumption trends. This course focuses specifically on technical utility regulation, detailing regulatory asset base accounting, cost allocation methodologies, retail rate structuring, and institutional power market unbundling.

Dubai - UAE: +971 4 450 5697
Istanbul - Türkiye: +90 539 599 1206
Amman - Jordan: +962 79 712 3347

What drives the transition from traditional cost-of-service regulation to performance-based rate making?

Traditional cost-of-service regulation offers little incentive for operational efficiency and can encourage asset overcapitalization. Performance-based rate making links utility revenues to productivity gains, capital efficiency, and service reliability metrics, aligning utility commercial incentives with consumer cost containment and system performance.

What work product do you take back from the Electric Utility Regulation, Tariff Design, and Market Reform Training Course?

You take back the completed Utility Regulation and Tariff Reform Dossier, which contains operational revenue requirement models, cost-of-service allocation workbooks, retail tariff design templates, and wholesale market transition assessment checklists ready for immediate application in rate reviews.

For Your Manager

Your team member will return with the capabilities to audit revenue requirement filings, allocate transmission and distribution expenses across customer classes, and structure cost-reflective electricity tariffs. Bringing back the Utility Regulation and Tariff Reform Dossier, they can immediately evaluate multi-year rate proposals, optimize retail pricing schedules, and support power market restructuring initiatives with transparent economic modeling.