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COURSE BROCHURE

Grid and Generation Capital Project Prioritisation Training Course

12 – 16 April 2027
Dar es Salaam

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Registered in the United Kingdom and Saudi Arabia

Grid and Generation Capital Project Prioritisation Training Course

Ref: 2597_98803 **Date:** 12 – 16 April 2027 **Location:** Dar es Salaam **Fees:** 7900 GBP

Grid and Generation Capital Project Prioritisation is a 1-week training course for energy sector project and finance analysts who must rank competing substation, line, feeder and power plant proposals into a defensible ranked capital plan. Candidate projects now outnumber budgets, so transparent ranking protects reliability and investor trust. Jupiter Prime Training delivers this subject as a practitioner course on scoring, weighting and sequencing power capital.

Why Grid and Generation Capital Project Prioritisation Matters Now

Three forces press on capital planners today. Rising demand from electrified transport, cooling and industry pushes reinforcement requests up faster than funding allows. Variable renewable plants and storage add connection queues that compete with ageing asset replacement. An organisation that ranks well defers the right schemes and avoids stranded plant; one that ranks poorly funds the loudest sponsor and inherits outages, curtailment and hard questions at the next tariff review, while reviewers increasingly ask for clear evidence beyond cost alone.

Who Gains Most from Grid and Generation Capital Project Prioritisation

- Analysts who prepare the business case and cash flow for each network or plant proposal
- Planners who translate load growth and connection requests into candidate reinforcement schemes
- Asset specialists who score condition, criticality and replacement urgency of existing equipment
- Finance staff who set hurdle rates, budget envelopes and funding phasing
- Portfolio coordinators who assemble the annual capital submission for approval

Planning and finance colleagues from one utility or generator gain most, since weights work only when both agree.

Grid and Generation Capital Project Prioritisation Capabilities

These outcomes turn a long list of power schemes into an ordered, funded sequence.

- Build a discounted cash flow per scheme — the go or defer call
- Calculate net present value and benefit-cost ratio on a common basis — the board comparison
- Design a weighted scorecard for reliability, safety and emissions — the ranking engineering leads agree
- Test rankings with sensitivity and Monte Carlo runs — confidence in each priority
- Apply budget constraints and dependencies to sequence the portfolio — the phasing finance teams fund
- Communicate the ranked plan and trade-offs — executive approval

Key Grid and Generation Capital Project Prioritisation Terms

- Net Present Value — the sum of a project's future cash flows discounted to today, minus its upfront capital cost.
- Value of Lost Load — the estimated customer cost per unit of unserved electricity, used to price reliability.
- Multi-Criteria Decision Analysis — scoring options against several weighted financial and non-financial criteria to produce one ranking.
- Capital Rationing — selecting the set of projects that delivers most value when the total budget cannot fund every positive scheme.
- Deferral Value — the benefit gained by postponing a reinforcement while demand, technology or cost uncertainty resolves.
- Tornado Chart — a sensitivity chart ranking which input assumptions swing a project's result most.

Grid and Generation Capital Project Prioritisation Day by Day

Day 1: Capital Planning Context for Networks and Plants

- Demand Forecasts and Connection Queues — Size of the Candidate Project List
- Asset Condition and Criticality Scores — Replacement Versus Reinforcement Choices
- Project Classes for Lines, Substations and Units — Like-for-Like Comparison Groups
- Stakeholder Map of Sponsors and Reviewers — Who Shapes Ranking Criteria
- Capital Budget Envelope and Hurdle Rate — Limits Every Ranking Respects

Day 2: Cash Flow and Discounting Methods

- Discounted Cash Flow Model Structure — Consistent Basis Across Competing Schemes
- Weighted Average Cost of Capital — Discount Rate Choice for Power Assets
- Net Present Value and Internal Rate of Return — Financial Merit of Each Scheme
- Levelised Cost and Annuity Comparisons — Unequal Asset Lives Made Comparable
- Avoided Outage and Loss Benefits Valuation — Reliability Gains Priced in Cash

Day 3: Multi-Criteria Scoring and Weighting

- Criteria Tree for Reliability, Safety and Emissions — Non-Financial Value Captured
- Pairwise Comparison Weighting — Agreed Importance Between Competing Criteria
- Scoring Scales and Normalisation — Fair Points Across Different Units
- Benefit-Cost Ratio Ranking Table — First Ordered List of Schemes
- Dependency and Mutual Exclusion Mapping — Projects That Must Pair or Compete

Day 4: Risk, Sensitivity and Portfolio Selection

- Tornado Sensitivity Analysis — Assumptions That Flip the Ranking
- Monte Carlo Simulation of Capital and Load — Probability Each Scheme Stays Viable
- Scenario Sets for Demand and Fuel Prices — Robust Choices Under Uncertainty
- Knapsack Optimisation Under Budget Limits — Best Funded Portfolio Mix
- Real Options and Deferral Value — When Waiting Beats Building

Day 5: Practising the Ranked Capital Plan

- Case Data Set for a Network and Generation Portfolio — Applying Cash Flow Methods
- Scorecard Calibration With Peer Challenge — Applying Agreed Weights
- Stress Test of the Draft Ranking — Applying Sensitivity Findings
- Multi-Year Phasing and Funding Profile — Sequencing Within the Envelope
- Ranked Capital Plan and Approval Memo — Completing the Work Product

Applying Grid and Generation Capital Project Prioritisation After the Course

- Re-score next year's proposals with the weighted scorecard and share the order with planning leads
- Run a tornado and Monte Carlo test on the three largest pending schemes before the next budget submission

Grid and Generation Capital Project Prioritisation Questions FAQ

What is Grid and Generation Capital Project Prioritisation and why does it matter now?

It is the ranking of network and power plant investments by cash flow, risk and weighted criteria. It matters because demand growth and renewable connections outpace budgets.

Which roles gain most from Grid and Generation Capital Project Prioritisation?

Project and finance analysts, network planners, asset specialists and portfolio coordinators gain most, especially those who must defend why one scheme outranks another.

How does Grid and Generation Capital Project Prioritisation differ from a general investment appraisal course?

It goes beyond single-project appraisal to rank a whole portfolio of power schemes. It adds weighted reliability criteria, budget-constrained selection and phasing for grids and plant.

What do you bring back from Grid and Generation Capital Project Prioritisation?

You bring back a ranked capital plan built on a case portfolio. It holds cash flow models, a calibrated scorecard and a phased funding profile you can adapt.

Grid and Generation Capital Project Prioritisation: The Way Forward

The ranked capital plan first informs which schemes enter next year's budget and which are deferred. Planning leads, finance managers and approval committees use it to see why each project sits where it does. After its first cycle, revisit criteria weights and value of lost load assumptions as demand and emissions priorities shift.