

F-203 Building and Analyzing Financial Models III



Course Description

This two-week course on financial modeling familiarizes participants with financial modeling and the relationship between the financial model and the underlying contracts in a limited recourse project finance transaction. The program is structured around a series of lectures and classroom simulations that will familiarize participants with the essential structure of power purchase agreements (PPA) and interrelated contracts, such as engineering, procurement and construction (EPC); fuel supply and operating agreements; and financing agreements. Participants will also build a financial model for a hypothetical gas-fired power plant using realistic numbers and assumptions geared to terms in the PPA.

This innovative course will use the financial model to structure realistic negotiation simulations. It will give the participants opportunities to gain hands-on, useful technical skills that can be applied in virtually any project judgment and implementation. Although the course will rely heavily on power sector technical and economic concepts, no prior sector specialization is required.

Become a Certified Project Finance Specialist

IP3's Project Finance Specialist Certification program provides a core body of knowledge in project finance, creating a world-class standard in project finance.

Certification requirements include 24 CEUs and successful completion of a Project Finance Specialist exam.

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Learning Objectives

Through successful completion of this course, participants will be able to:

- Deal confidently with both the contracts and financial models that inform any project finance transaction
- Thoroughly understand the trade-offs that take place within the negotiation process as developers, lenders and public utilities seek to structure a transaction that provides acceptable returns and prices for all key stakeholders.

Who Will Benefit

- National, regional, and local government officials responsible for infrastructure financial modeling
- Contract officers and regulatory commissioners
- Financial analysts from PPP or privatization units
- Public servants, utility managers, executives, and financial experts
- Audit or project managers
- Staff of bilateral and multilateral international organizations

IP3 is an accredited provider of Continuing Education Units (CEUs) as sponsored by the International Association for Continuing Education and Training (IACET).



Advanced Modeling Functions and Key Concepts

- Financial modeling fundamentals
- Financial modeling objectives
- Microsoft Excel® basic and advanced features
- Overview of key concepts
- Cash waterfall
- Modeling working capital
- Modeling depreciation and taxes

Debt Financing and Debt Repayment Schedule

- Capital projects
- Debt financing, amortization and schedule
- Debt service coverage ratios (DSCRs)
- Financial analysis

The Legal framework for the PPP Agreement: Power Purchase Agreement (PPA)

- Defining PPAs
- PPAs in project finance
- Preparing the PPA
- Distribution of obligations
- Topics covered in the PPA
- Key financial provisions
- PPA pricing and revenues
- PPA termination options
- PPA agreement checklist

Project Agreements I: Contractual Structure and Risks

- Construction risks in PPPs and the construction risk matrices
- Construction structures for the EPC in PPP projects
- Select clauses and issues
 - Bankability and EPC contracts
 - Features of the EPC contract
 - Performance guarantees (PLDs and DLDs)
 - Security and guarantees
 - Defects liability
 - Force majeure
 - Back-to-back interface and interface agreements
 - Material adverse changes
- Back-to-back contractual flow-through
- Lender protections under EPC and lender direct agreement
- O&M agreement and interface agreement
- Key provisions of O&M agreement

Building a Funding Schedule and Dealing with Circularities

- Construction period cash flows
- Building funding schedules

Modeling Financial Statements

Project Agreements II: EPC, O&M and Others

- O&M risk allocation and fuel supply
- O&M checklist items
- Key issues in the O&M agreement

Steps of Financial Analysis Using the Financial Model

- Project, sensitivity and leverage analyses
- Debt service coverage and loan life cover ratios
- Terminal value

Risk Allocation in Project Finance: Sensitivity Analysis

- Analysis using the financial model
- Risk allocation in project finance

Simulation Exercises: Building Gas Fired Power Plant Financial Model

- Part I: Inputs, funding and operations
- Part II: Returns, financials and sensitivities
- Part III: Tax, depreciation and waterfall
- Part IV: Returns, financials and sensitivities

