Building a Financial Model

For the Operations of a Solar Power Project

Summary

This course reviews project economic concepts and focuses on the skills required to design and create a financial model to help a power company decide whether it should invest in a new solar power project that has a power purchase agreement in place.

The course material includes model design, logic, construction, financial concepts and accounting treatment.

Various intermediate Excel tools along with helpful keyboard shortcuts will also be covered throughout the course.



Prerequisites

Participants should have a basic working knowledge of Excel and the power sector prior to taking this course.



Timing

This course requires 8 – 16 hours, depending on the amount of material to be covered.

Learning Topics

1. Power Asset Dynamics and Economics

- Review the unique modeling features required to evaluate a regulated entity
- Discuss the specific revenue and cost drivers of a power project
- Learn to create a model for which the returns to shareholders have been pre-set by the regulator

2. Design and Structure a Financial model

- ✓ Design a clear and logical financial model
- Create defined inputs and assumptions

3. Build Powerful Scenarios and Financial Statements

- Use switches to create effective scenarios and value drivers
- ✓ Forecast and build-up the project's revenues and expenses
- Design and incorporate a company's income statement, balance sheet and cash flow statement
- ✓ Construct all necessary schedules, including:
 - Depreciation / CAPEX
 - Working Capital
 - Income Tax
 - Debt and Interest
 - Shareholders' Equity

4. Evaluate the Project

- Incorporate a schedule to evaluate project returns
 - Net Present Value ("NPV")
 - Internal Rate of Return ("IRR")
 - Payback and Discounted Payback periods
- ✓ Build a strong summary page to display the results
- Set up print ranges to optimize the appearance of printed output

