Small Utility-Scale PV Project Financing

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Presentation Overview

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Project Overview

Project Description

- 4 MW AC project(s) in Southern California
  - Two project sites of equal size
  - Two identical PPAs under standard-offer contract with SCE
  - 18-month COD deadline from PPA signing
  - Single-axis trackers with Tier-1 c-Si modules
- Project Timing
  - 1H10 – Feasibility studies (transmission, CEQA)
  - Sep 2010 – PPA and IA signed
  - Dec 2010 – Acquisition diligence
  - Mar 2011 – CUP obtained
  - Mar 2011 – Acquired project from developer
  - Apr-Aug 2011 – EPC and equipment selection
  - Nov 2011 – NTP
  - Mar 2012 – COD

Parties Involved and Roles They Played

- Initial Developer
  - Selected and secured sites
  - Created preliminary design
  - Applied for and received PPAs, IA, Use Permits
  - Capital invested – IA deposits, CEQA studies, land purchase options
- Equity Sponsor (PowerFin's group)
  - Sourced debt and tax equity
  - Selected EPC and equipment selection
  - Performed project oversight
- Vendors
  - Attorneys – bulk of work done during diligence
  - EPC company – turnkey installation, no capital contribution
  - Panel supplier – panels only, no capital contribution

Project Stages

I. Development and Project Selection

- Developer
  - Site selection criteria:
    - Access to appropriate distribution lines (upgrade costs)
    - Observed pricing dynamics in specific regions and nodes
    - Friendliness of permitting authorities
    - Solar resource, topography, and geology
  - Why, how, and when should the developer exit?
  - Iterative question: Is this a bankable project?
- Equity Sponsor
  - Constantly sourcing investment opportunities
  - Is this a real deal?
    - Is there a PPA, what is the price, and how is the language?
    - Special assumptions (costs, incentives, interconnection, etc…)?
    - What is the timing?

II. Negotiations, Diligence, and Closing

- Developer Considerations
  - What do I want from the project and how does it fit into my strategy?
  - Should I engage a sell-side agent (5-broker deals are not good)?
  - How much can I get and are the bids real (too many LOIs)?
  - Whom to sell to?
    - Reliability – balance sheet, reputation, integrity, experience, focus
  - What kind of progress payment schedule is acceptable?
  - Critical to understand solar/power and to identify knowledgeable parties
- Equity Sponsor Considerations
  - Is the project bankable and is it worth our time?
  - Is the timing realistic (deadlines, permitting, construction)?
  - Reliability of counterparties and proper recourse (lots of promises)…
    - *Completing a solar project is like originating a 20-year bond*

III. Construction

- Considerations (besides price) when evaluating EPCs
  - What is their scope (design-build, turnkey)?
  - Reliability and bankability
    - Balance sheet, diversity of revenues, experience with solar
    - Warranties – output, workmanship, etc…
  - Footprint and mobilization capabilities
  - Track record – safety, experience with equipment/design (trackers)
  - Timing, availability, labor and engineering capabilities
- Considerations (besides price) when evaluating equipment
  - Panel – Tier 1 and why (vertical economics, balance sheet)?
  - Inverter – warranties and complementary O&M?
  - Racking/tracking – true engineering cost/benefit/risk tradeoffs (panel price)

IV. Completion and Operation

- Smaller Project Interconnection
  - Connect to lower voltage lines – less complex and less expensive
  - Same interconnection criteria, checklists, inspections, and timelines
  - More sites (POIs) = more work
- Smaller Project O&M
  - Easier to isolate problems and easier to maintain
  - Outsourcing to maintenance contractor provides wider knowledge base
    - Breadth of contractor's experience at other sites (and equipment) can be leveraged
    - Not having regular on-site personnel increases need for quality design and monitoring
  - Accounting and reporting are the same for a larger project

Financing Considerations

- Institutional Debt vs. Bank Debt
  - Institutional Pros: Lower underwriting costs and longer duration
  - Institutional Cons: Make-whole (pre-pay penalty)
  - Bank Debt Pros: More banks than institutions and can go smaller
  - Bank Debt Cons: One-off loans are more expensive
- Tax Equity
  - Less of a concern when 1603 Grant was available
  - Generally not available for sub-10MW projects
- Sale-Leaseback
  - Combination of debt and tax equity
  - Be careful with (wary of) exotic structures

❖ *Financing dictates valuation and timing of entry and exit*

- *Try to have as many options as possible*

Takeaways

Unique Factors for Small Utility-Scale Projects

- Financing – hard to get tax equity and debt
- Bandwidth – same amount of work for large project
- Pricing – smaller, distributed projects tend to get higher PPAs
- Costs – mobilization and diligence costs/watt are higher
- Development – PPA and interconnection can be expedited
- Transmission – distributed sites have less transmission risk
- Construction – completes very quickly
- Negotiating takes time – strong sponsor mitigates this

Pitfalls to Avoid and Strategies That Work

- Pitfalls
  - Smaller projects have shorter deadlines, so don't get too cute
  - Don't get bogged down trying to negotiate that last cent
  - Governance and relationships in partnerships can get strained
  - Overlooking utility and regulator protocols and timing
  - Avoid unknowledgeable parties (brokers, developers, etc…)
  - Too many cooks spoil the soup
- Strategies That Work
  - Ability to provide 100% equity affords significant negotiating leverage
  - Understanding cap structure and costs early in the process
  - Being conservative on valuation
  - Agnosticism towards EPCs and equipment
  - Know your contracts and counterparties
  - Keep all parties informed

Thank You

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