
Advancing Wind Power in Illinois Conference 2011

# Jon Peeples

TradeWind Energy

## Large Wind
## Development, Economics & Finance
## Breakout Session

Friday, July 22, 2011, 1:30 PM

# IWWG – Advancing Wind Power in Illinois Conference
# Project Finance

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## TradeWind Energy

- Located in Kansas
- Midwest-based wind energy developer
- Portfolio totaling 4,500 MW in 11 states
- Projects with announced PPA's in place:

| Project | Status | Location | C.O.D. | Utility Off-take Customers | Nameplate Capacity (MW) |
|---|---|---|---|---|---|
| Caney River | Construction | Kansas | 2012 | Tennessee Valley Authority | 200 |
| Rocky Ridge | Construction | Oklahoma | 2012 | Western Farmers Electric Cooperative | 150 |
| Smoky Hills Phases I and II | Operating | Kansas | 2008 | Sunflower Electric Power Cooperative<br>Midwest Energy<br>Kansas Board of Public Utilities<br>City of Independence, Missouri<br>City Utilities of Springfield | 250 |

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## Project Finance Introduction

- An asset-based debt financing method
  - Project company or holding company is the borrower
  - Loan is non-recourse to sponsor
  - Debt is only secured by project assets (LLC)
  - Debt is repaid from the project/portfolio cash flow

"A funding method for an activity in which debt is used and repaid with the income of the activity itself. Additionally, the assets that the initial debt financed generally serve as collateral. Project finance can be high risk, but still carries lower risk than simply not securing the debt. It allows for persons and companies with little start-up capital to innovate and contribute to the economy."
www.financial-dictionary.com

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## Key Parties within Finance Structure

| | |
|---|---|
| Sponsor | Project developer/owner and or equity |
| Tax Investor | Passive investor with limited specific investment horizon investing to utilize tax benefits (PTC & MACRS) |
| Borrower | Pass-through entity (LLC) that owns project assets |
| Lender | Bank or institutional |
| Offtaker | Purchaser of project output (energy/RECs) |
| Landowner/Lessor | Rights given to owner to develop |
| O&M Providers | Owner, 3rd party, WTG provider |
| EPC/BOP Contractors | Constructor of Wind Project |
| Equipment Suppliers | Provides equipment, warranties and possibly O&M |
| US Treasury/DOE | Provider of ITC/Cash Grant – more to come |

- While cash flow is king, all of the aforementioned parties are painfully necessary to secure project financing

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## Why Project Finance?

- Sponsor restrictions/lack of credit
  - Start-up companies, growing developers
  - Corporate debt covenants
- Credit arbitrage
  - Better credit/pricing at project level – isolation of corporate liabilities
- Future project flexibility
  - Refinancing single projects as opposed to portfolios
- Risk Allocation
  - slide 2, spreading the $ and risk over multiple parties, with objective of preserving expected cash flow

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## Tax Benefits: MACRS Depreciation, Production Tax Credits & Investment Tax Credit/Cash Grant

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## Accelerated Depreciation

- Modified Accelerated Cost Recovery System (MACRS) – Allows taxpayers to generally claim accelerated depreciation deductions over a 5-year recovery period for the applicable tax basis of the wind energy facility.
- Applicable tax basis is roughly 95% and can be allocated to a 5 year schedule
- MACRS generates the need for tax appetite and or further investment in the project

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## Production Tax Credit (PTC)

- Production Tax Credit (PTC) – Taxpayers are permitted to claim a Section 45 production tax credit based on the production and sale of electricity over a 10-year period for qualified wind facilities placed into service by 12/31/2012
  - Current PTC value of 2.2 cents per kWh ($22/MWh)

**Example:**

100 MW Project with a 40% Net Capacity Factor

| | |
|---|---|
| MWh | = (8760*100*40%) = 350,400 |
| Yr 1 PTC | = 350,400*$22 = $7,708,800 |
| 10-yr total | = $77,088,000 |

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## Investment Tax Credit (ITC)/Cash Grant

- Investment Tax Credit (ITC)/Cash Grant – Taxpayers are permitted to claim a Section 48 investment tax credit equal to a certain percentage of the project's tax basis. *Section 1603 of ARRA allows election of a Cash Grant in lieu of a tax credit.*
  - 30% of 5 year MACRS for wind energy facilities
  - Reduces depreciable basis

**Example:**

Same 100 MW project with the same 40% Net Capacity Factor

Total Project Cost = $180,000,000

5-Yr MACRS (95%) = $171,000,000

Cash Grant (30%) = $ 51,300,000

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## Which Adds More Value to the Project?

Great Question!

Financially speaking let's look at the previous examples:

- Net Present Value of PTC at 7%
  - $57,921,999
- Value of Cash Grant
  - $51,300,000

- PTC equals more $$ in today's terms, correct?

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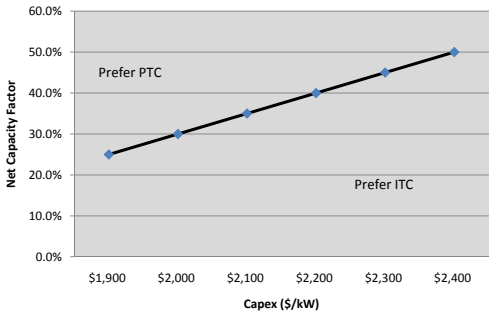
## PTC vs. ITC (contd)

• Since the passing of American Reinvestment Recovery Act, few projects have elected the PTC




• Illustration shows that higher wind resource and lower cost favors the PTC; lower wind resource and higher cost favors the ITC

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## PTC/ITC Correlation to Project Finance

- Both PTC and ITC require a tax investor
  - Tax Investor in the PTC deal will invest in the PTCs, as well as the tax benefits generated from the MACRS
  - Tax Investor in an ITC deal will invest in tax benefits generated from the MACRS
- Conceptually speaking which is worth more?
  - Have to analyze risk
  - Dollars today worth more than dollars tomorrow
  - What are the prospective investors comfortable with
  - How are equity returns affected

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## Overall Project Finance Driving Forces

- PPA procurement
- Project Economics
- Supply of tax equity
- Supply of bank debt
- Demand for capital

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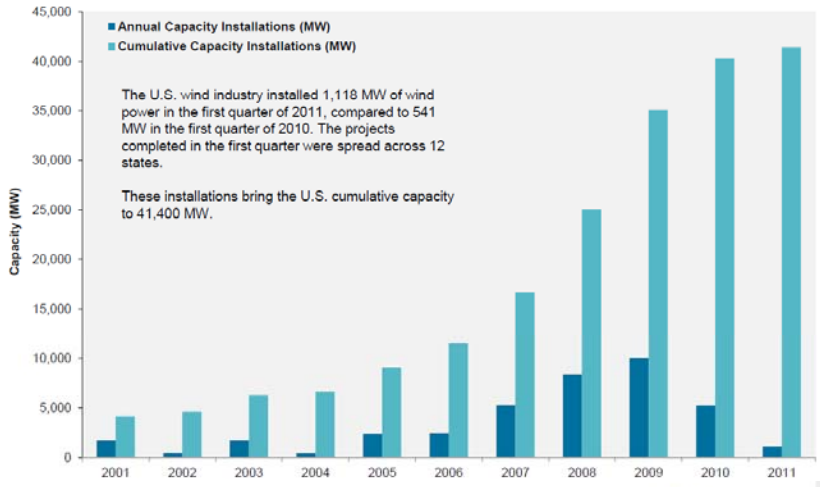
## Current Status of Construction




Data Source: American Wind Energy Association – 1st Quarter 2011 Market Report

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