

Get a Greater ROI in Wind Project Development Today



Market Perspective on Wind Energy Company Valuations Future Consolidation

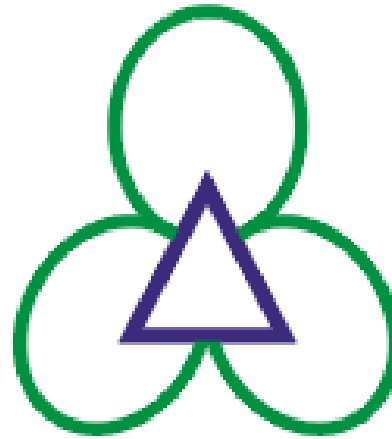
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Valuation of Renewable Projects at Each Stage of Project Development



Trintek Energy Consulting, Inc.

Creating Competitive Advantage Thru Intelligent Development

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AWEA WINDPOWER 2011

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Overview

- Many wind energy projects/companies have been for sale.
- However, a lot of deals discussed, never get closed.
- A big reason is buyer-seller perception differences or gaps.
 - Market's solution is to leave the value undetermined and use “earn-out” structures with milestones to be met.
- Educating buyers and sellers on value at each milestone in development is a start in closing the “value perception gap”.

Purpose

- The purpose of this topic is to examine:
 - ❑ The milestones defining a wind project development process.
 - ❑ The percentage project completion at each milestone.
 - ❑ The amount of project capital allocated to each milestone.
 - ❑ The remaining risk left in the project at each milestone or stage.
 - ❑ The value of the project at each milestone in development.

Market Value

- Valuation is not an exact science, there is some art involved.

Theoretical Definition

- A transaction involves a willing buyer and a willing seller.
- Both parties act in their own best interests to get the best price.
- In theory, both have equal bargaining power and equal information.
- This results in a transaction at “Market Value” .

Buyer-Seller Dance

- Why can't buyers and sellers meet each other's expectations?
 - It's a little like selling your home—you always believe it is worth more than the other fellow does.
- Volatility of power prices, turbine costs.
- Volatility of financing alternatives.
- Volatility of regulatory changes, PTC, ITC-Cash Grant, RPS's.
- Going forward, the reality of transmission, zoning, and PPA availability (price of Natural gas), vs. yesteryear's low hanging fruit.
- Wall Street myths, apples and oranges comparisons.

Definition of Milestones

- **Wind Site Selection**

- Research sites-desk top reviews
- Site prospecting –travel
- Transmission screening-
-possible load flow modeling
- Zoning screening-read ordinances
- Talk to county officials, etc.
- Wind resource estimates
-meteorological models/reports

Definition of Milestones (Cont.)

•Site Control and Wind Measurement

ADD:

- Obtain long term wind leases

- Install met towers

- Collect and analyze actual site wind data

- Obtain consultant's report i.e., a "wind study".

**•Hey - Do we have a \$150,000 per MW
Yet?**

\$150,000/Design MW??

Met Tower

At this Milestone
Got Value?

If So, How Much??

Definition of Milestones (Cont.)

Fully Developed Site, ADD:

- Environmental due diligence and permitting
- Obtain all permits and zoning –w/non appealable approvals
- Surveying
- Site layout
- Project economics model
- Obtain signed interconnection agreement
- Executed project contracts: PPA, turbine purchase, B.O.P. construction, tax abatement, LTSA, etc.
- Two year wind study

Percentage Completion by Milestones

- Hint, site selection, site control, and wind measurement is maybe 15-20% completion, and not a major cost component.
- Estimating % completion will be project specific and part art as well as science.
- Percentage completion on a project to obtain a PPA in Texas at a node with negative electricity pricing where gas is on the margin, will not be the same as for a PPA in the Midwest.
- Interconnection queues are a big variable, regionally.
- Three years ago, turbines vs. no turbines was a bigger factor.

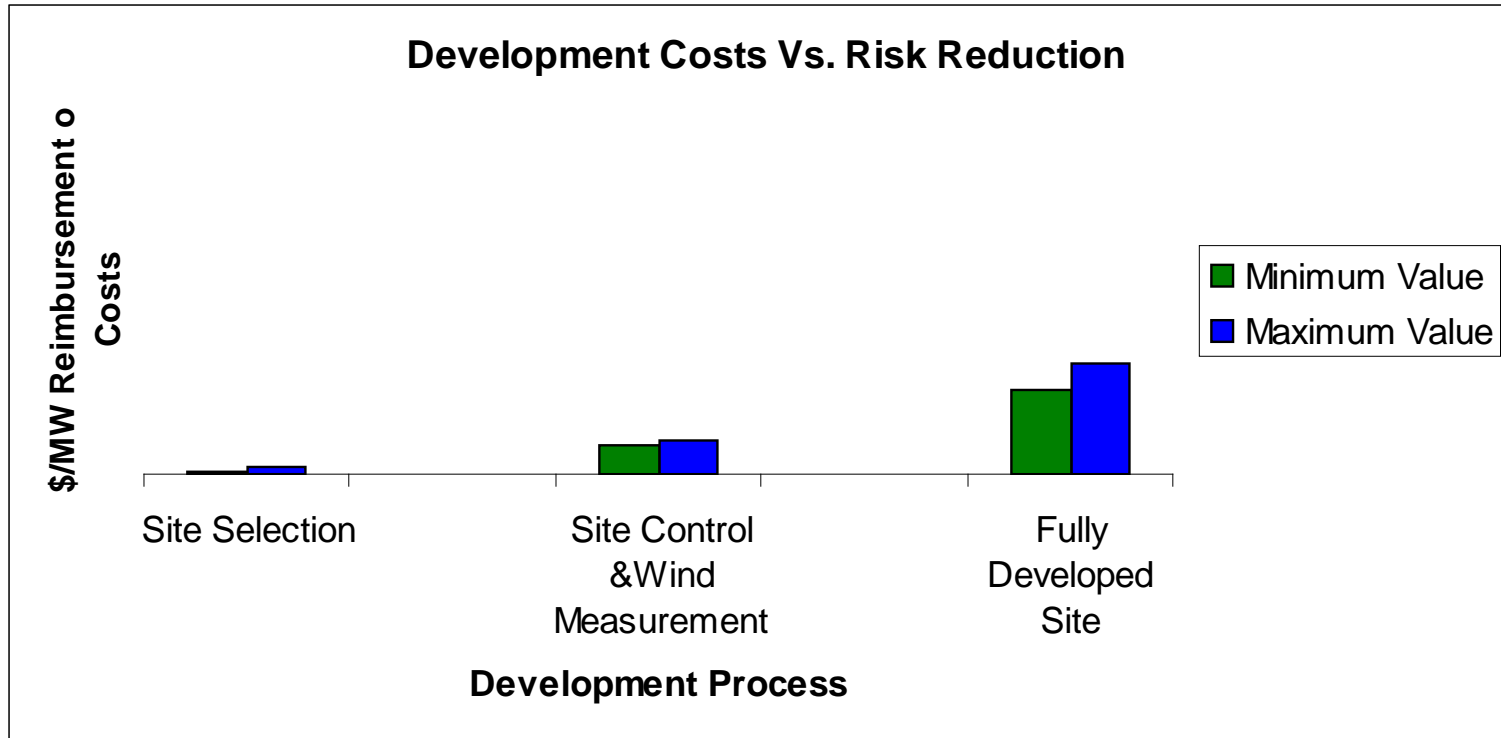
Allocation of Risk Premiums

Wind Project Development Life Cycle							
Assumes 100 MW Block of Wind Power							
SNO		KEY STEPS	ACTUAL COST/MW \$/MW	RISK PREMIUM ABOVE COST \$/MW	MARKET VALUE (ACT. COST PLUS PREMIUM) \$/MW	PERCENTAGE OF TOTAL COST %	PERCENT COMPLETION %
			A	B	(A+B)		
1		SITE SELECTION					
2		SITE CONTROL / LAND AGREEMENTS					
3		WIND ASSESSMENT					
4		ENVIRONMENTAL REVIEW					
5		PERMITTING AND ZONING					
6		SURVEYING					
5		ECONOMIC MODELING					
7		INTERCONNECTION STUDIES					
8		DEVELOPMENT TEAM WAGES/SVCS.					
9		NEGOTIATION OF PPA					
10		TURBINE PROCUREMENT					
11		CONSTRUCTION CONTRACTING					
12		FINANCING, INCL DSR, IDC, FEES,					
13		WORKING CAPITAL					
14		DEVELOPMENT FEE PAID OUT					
15		CONTINGENCY					
16		MISC & ADMIN OVER HEAD					
TOTAL COST TO DEVELOP AND CONSTRUCT \$/MW			1,700,000*	Sum of B \$/MW PREMIUM	Sum of A+B's \$/MW MARKET VALUE	100%	100%
<i>*Normal Terrain and Interconnection costs 2011</i>							
*(EXPRESSED IN \$/kW)			\$1,700.00	NOTE: \$/MW MARKET VALUE TIES TO \$NPV/MW FROM ECONOMICS MODEL (Look at Levered and Unlevered NPV/MW)			

Derive Valuations by Milestone

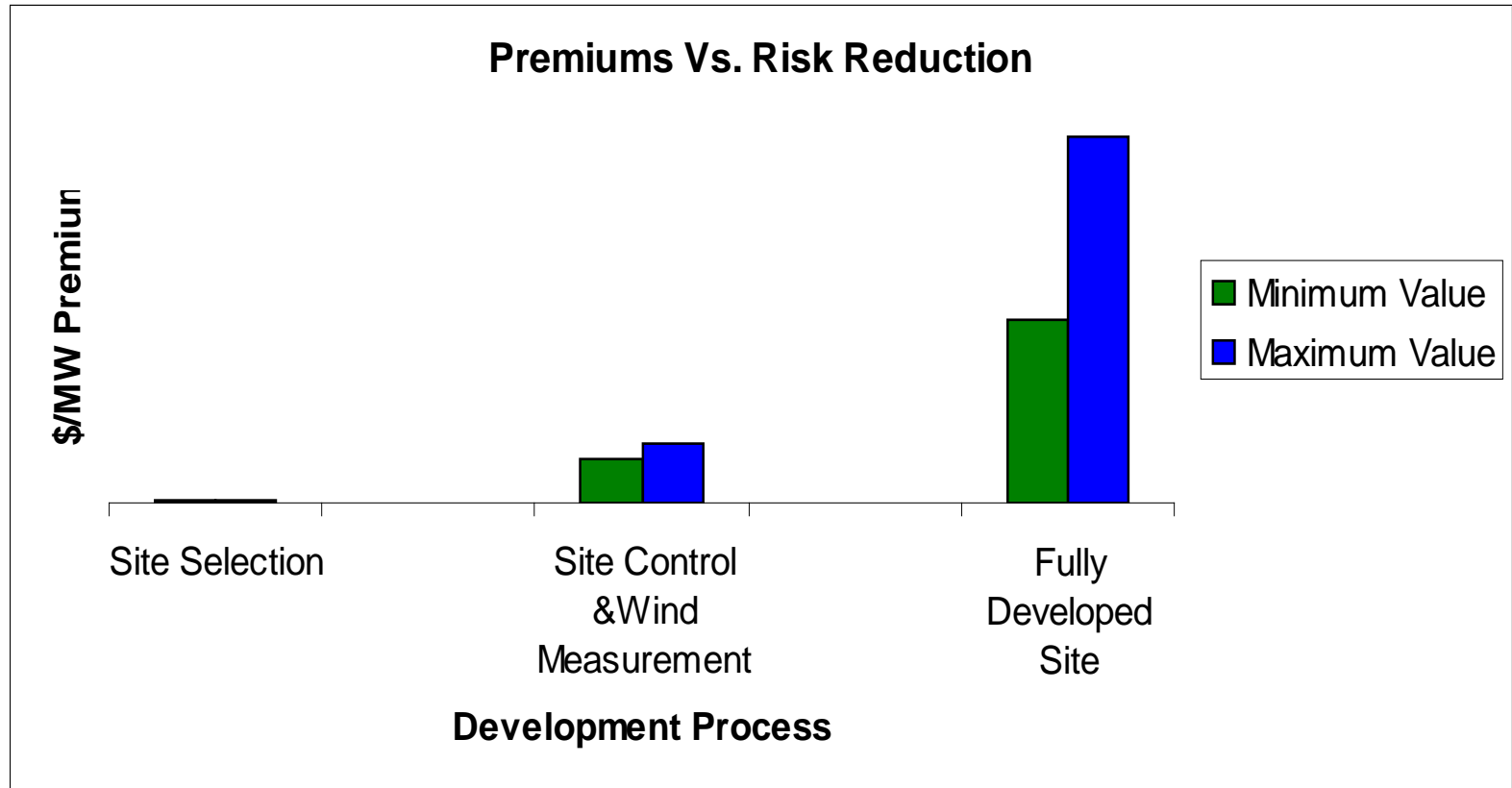
- Valuation is tied to the \$NPV from the project economic model.
 - If project is completed, it is worth \$NPV/MW.
- Valuation is then allocated to development cost steps/activities.
- Can enter risk premium spreadsheet, and derive \$/MW value for a certain set of milestones or certain percentage of completion.
- This approach works on a specific project or multiple projects sharing the same or nearly identical characteristics, i.e., Midwest, 33% C.F., same tax jurisdiction, etc.

Actual Development Costs Reimbursed



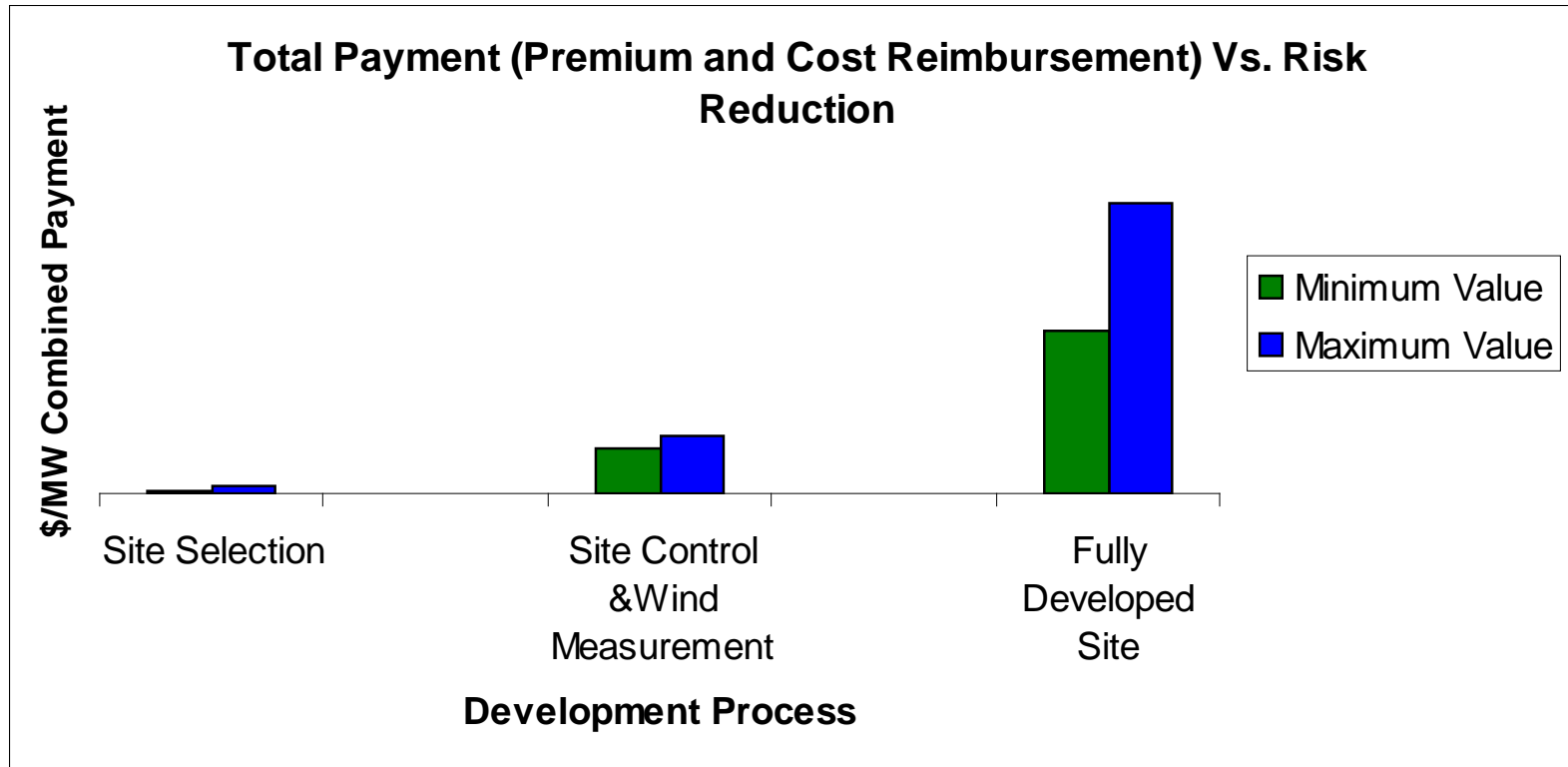
- Costs for land leasing and wind measurement for several years is a small portion of development costs and overall risk reduction.
- Actual dev. costs are reimbursed above and beyond the risk premium.

Premiums Paid Vs. Risk Reduction



- Premium increases dramatically with completion of development.
- Range depends on wind resource (NCF), property taxes, PPA pricing, etc.
- Projects in a class 6 wind resource with an \$80/mwh power price are worth more than class 4 sites with \$60/mwh pricing

Total Market Value



- For a finished development with risks largely mitigated and construction pending.
- Only the highest quality sites are valued in the upper range.

Customize Project Model

- Especially for specific tax provisions
 - ❑ Value of step up in tax basis for the asset, if any
 - Reduced capital gains to seller
 - Increased depreciation deductions for buyer
 - ❑ Differing tax jurisdictions-especially property taxes
 - ❑ Key valuation difference – 10-15 year property tax abatement vs. property taxes of \$15-25,000/per turbine per year.
 - ❑ Industrial machinery exemptions-or enterprise zone sales tax exemptions are worth millions.

How Much Does Valuation Depend On Who The Buyer Is?

- Strategic or balance sheet buyer may have different motives.
 - ❑ Build critical mass for the business quickly.
 - ❑ Build MW pipeline and portfolio on PE multiple gap in stock market vs. asset market.
 - ❑ This buyer likely has the lowest cost of capital, therefore the lowest discount rate = big advantage.

- In order to accomplish goals, may desire to bid assets to break-even, i.e. to the unlevered discount rate where $NPV = \text{zero}$.

- These buyers may even be ignoring the cost of back leverage at corporate level required on the margin, at a later date.

How Much Does Valuation Depend On Who The Buyer Is?

Strategic or Balance Sheet Buyer (continued)

- May have IPO strategy in which the stock market may pay inflated PE multiples for assets
 - Laying off the risk and the costs on unsophisticated individual investors who do not understand the true risks and costs.
 - Is this a good value creation arbitrage of the stock to asset market or just risky financial engineering?
- Highest valuation may be from this type of buyer.
- This type of buyer is more likely to bid on a whole company or portfolio basis.

Other Buyers – Purchasing For A Return **in the Asset Market**

- Most buyers will want to make a normal return on the acquisition.
- I.e., what a buyer can afford to pay and still make a reasonable levered after tax return of around 15% assuming approximately 60% leverage at project level.
- An asset buyer focused on value creation on a project basis in the asset market will not be able to match the \$/MW that strategic buyer will perceive due to the lower cost of capital of the strategic buyer.
- Market appears to over-price assets--sellers under estimate operating costs, property taxes, working capital, and a number of costs, intentionally or otherwise.
- If so, this may suggest more of a Greenfield strategy, or at least points to focusing on purchasing earlier stage assets which should not command as much premium valuation.

How Does Reimbursement of Dev. Costs Fit In?

- Confusion in discussing \$/MW market value. Does it include reimbursement of imbedded actual costs?
 - Yes as defined in this presentation and its assumptions.
 - The combination of actual cost and risk premium is the market value of the project.
- The risk premium paid is generally the “development fee” plus the increased value created by risk reduction across every activity in the project development process.
- Reimbursement of actual costs is usually in addition to the development fee and the risk premium.
 - Reimburse all actual documented costs that the developer can substantiate with bona fide verified receipts.

Detailed Due Diligence Check List

- Due Diligence Issues Will Also Affect Valuation

Wind Resource

Transmission

Match Land, leases vs. title search and survey

Zoning vs. layout- Design MW's vs. real MW's

Permits

Economics Model

Project Contracts

Financing

Schedule

Layout Mistakes Also Affect Valuation



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Got \$/MW?



Value is in the eye of the Beholder....

Return on Development Capital

Speaker: Joseph Slamm

Managing Director, Hudson Energy Partners

Speaker did not use slides.



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PPA Trends/Issues: Increasing Development Risks on Developers, Costs, Valuation and Financing Implications

Speaker: Mike Garland

Chief Executive Officer, Pattern Energy

Speaker did not use slides.



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Questions and Answers



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