



ALYRA RENEWABLE ENERGY FINANCE, LLC

A Discussion on Wind Power - Ownership and Financing Issues

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Overview of wind power economics

- Capital intensive, low operating cost.
- Variable wind = variable revenue.
- Sources of revenue include power sales, REC sales and federal tax incentives.
- How much does wind power cost?

| Project Size | 10 MW | 50 MW | 100 MW |
|--------------------------------|-------|-------|--------|
| Cost of Generation (Cents/kWh) | 9.5 | 8 | 7.75 |
| Price of Power (Cents/kWh) | 7.5 | 6 | 5.75 |
| Capital Cost (\$/kW) | 2,500 | 2,200 | 2,000 |
| Capital Cost (\$/Turbine) | 3,500 | 3,200 | 3,000 |

Assuming 1.5 MW turbines and 36% capacity factor

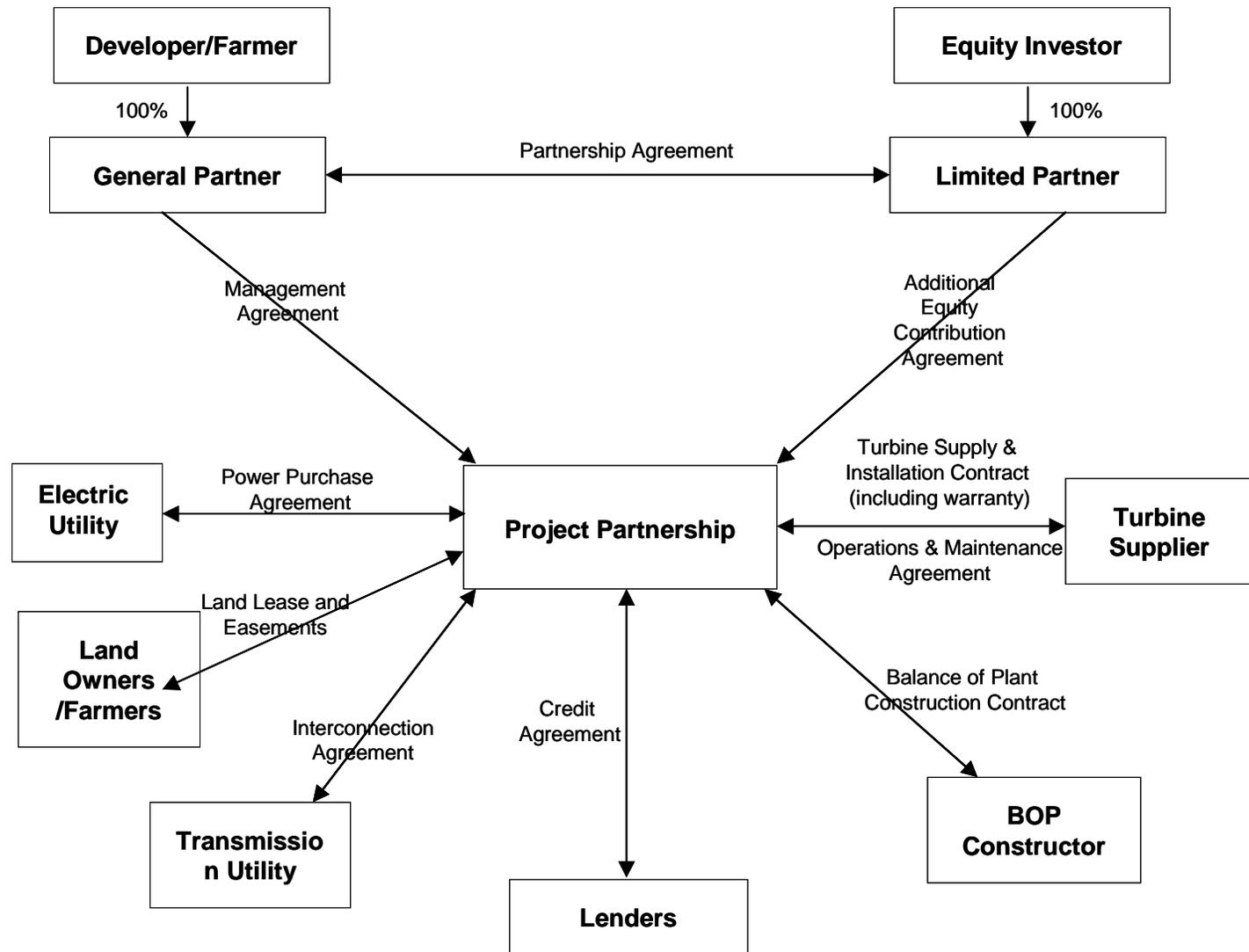


Wind power ownership structures

- How wind power projects are financed/structured
 - Site development and permitting.
 - Secure turbines and power sales contracts.
 - Secure 3rd party equity (Tax Equity) and bank debt.
 - Generally, a 3rd party investor owns majority/all equity interest in the project for the first 10 years (the “PTC period”).
 - The 3rd party investor is allocated majority/all tax benefits (tax losses, tax credits) during the PTC period while the local developer is allocated a small portion of cash distributions.
 - The developer regains full/majority ownership and cash distribution after the PTC period.
- Who can beneficially own a wind project – mostly large corporations
 - Need for adequate taxable income.
 - “Passive Loss” rules.
 - “At Risk” rules.
 - Familiarity with wind risk.

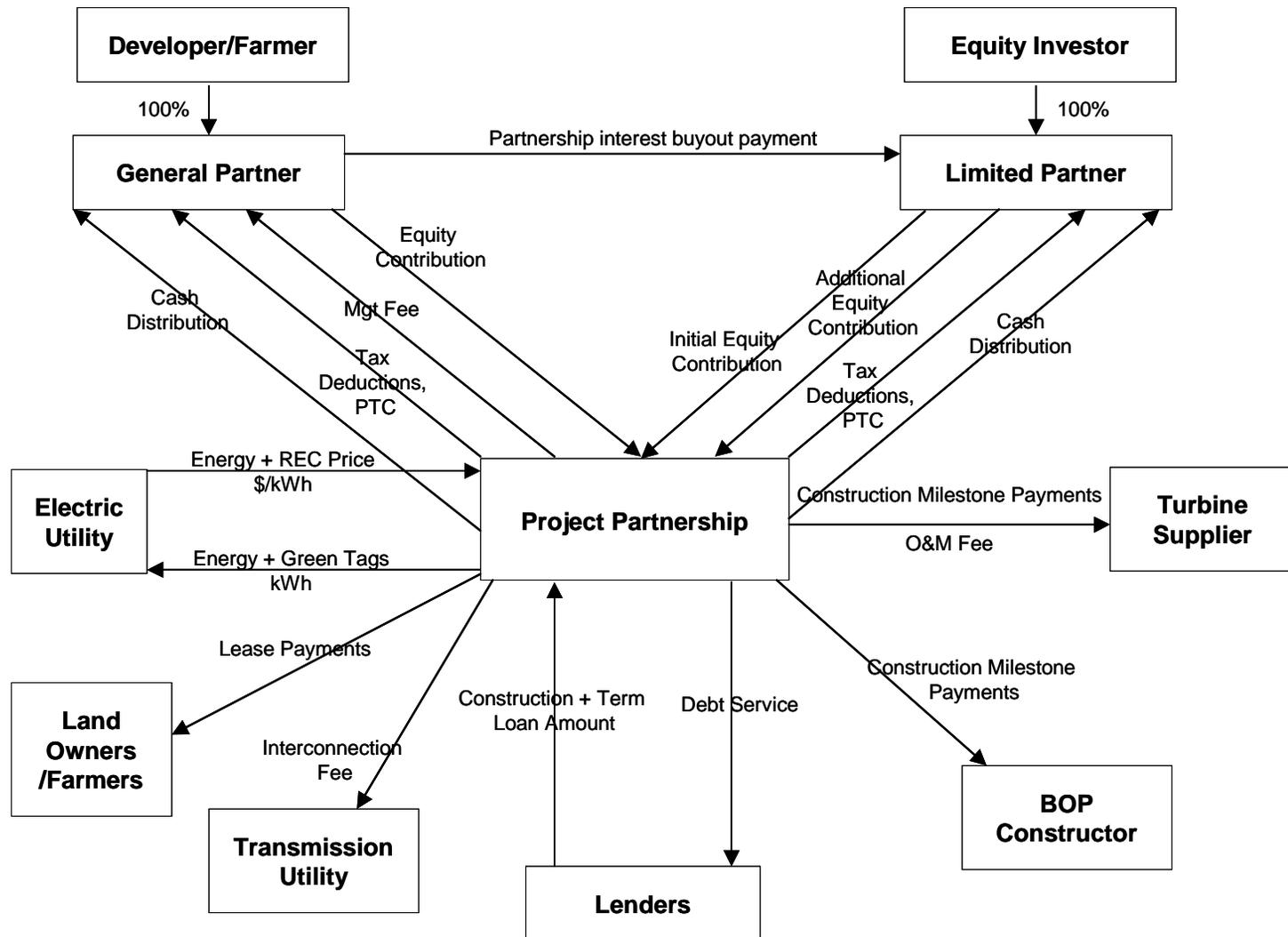


Ownership schematic of a typical wind power project





Flow of funds schematic of a typical wind power project





Community owned wind power projects

- Municipal owned projects
 - Can be small or large.
 - Often competitive with commercial sector.
 - Self consumption of power.
 - Financing flexibility – CREBs.

- “Pooled” community member owned projects
 - Need to find individual investors with adequate tax capacity from flow-through passive investments.
 - Possible to use a reversionary ownership approach through joint ventures with local / regional corporations.
 - Securing power sales contract most critical.
 - Regulated mandate essential – Minnesota is a good example.



Overview of the Clean Renewable Energy Bond ("CREB") program

- A new funding program under the 2005 Energy Act:
 - Available for funding renewable energy projects as well as plants producing refined coal.
 - Available to cooperative electric companies and governmental bodies (including any state, territory, U.S. possession, Indian tribal government or the District of Columbia, and any political subdivision of any of these).
- \$800 million allocated and the deadline for application expired in April 2006. Legislation currently proposed to extend the program for 2-3 years. Competitive allocation process by the US Treasury.
- Bonds will be issued by project owner/issuer to finance construction of new renewable energy facilities.
- Instead of receiving interest payments, the holders of the bonds will receive tax credits against their U.S. Federal taxes. The amount of the periodic tax credits will be equal to an imputed fixed interest rate ("credit rate") times the remaining principal balance.
- The project owner will be liable for principal repayment.



Benefits of the CREB program

- Allows unprecedented flexibility of ownership and financing structure, along with an interest free financing.
- No “passive loss” or “at risk” restrictions. Bonds can be purchased and the tax credit utilized by any person with adequate taxable income.
- Unlike the PTC, power can be used by the project owner or sold to third parties.
- Unlike the PTC, efficient ownership structures such as sale-leasebacks are allowed. A muni without project operating experience can lease the project to a third party and just purchase the power.
- Unlike the PTC, No AMT Restrictions – bond holder is allowed to use the tax credits against Alternative Minimum Tax.



CREB vs. PTC - Economics

Comparison of the options available to a municipal/coop utility to (a) purchase renewable energy through a 20-year PPA from a third-party owned wind power project or (b) own the project and finance it through CREB.

| | Purchase Power 20-Year PPA | Build/Own + CREB Finance |
|---|---------------------------------------|-------------------------------------|
| Project size | 100 MW | 100 MW |
| Net capacity factor | 36.0% | 36.0% |
| Assumed project/PPA term | 20 years | 20 years |
| Power price (year 1, inflated @ 2%) | 5.0 - 6.0 cents/kWh | 4.5 - 5.0 cents/kWh |
| Project level debt | 60 - 70% | 80 - 90% |
| Project debt tenor | 16 yrs | 16 yrs |
| Total project cost | \$2,000/kW | \$2,000/kW |
| Coop/Muni initial investment | 0 | \$19 MM |
| Coop/Muni initial investment payback | NA | 5 - 8 Years |
| 20-year IRR on Coop/Muni investment | NA | 18 - 20% |

The CREB financing could reduce effective cost of power by about 20 - 30% compared to the municipality buying power from a traditionally financed wind project



Public policy issues

- Tax rules vs. market efficiency [Federal level]
 - Ownership issues – passive loss rule exceptions for community owned wind farms?
 - Financing flexibility – CREB type tax incentives for community/commercially owned projects.
- Access to markets for small, community owned projects [State level]
 - Need regulated support to sell power.
 - Standard power sale contracts or feed-in tariffs.
 - Standard interconnection agreements.



About Alyra

Alyra provides investment banking services to the renewable energy sector. The firm specializes in equity and debt structuring and cross-border joint venture advisory. Our clients include leading renewable energy companies in North America and Europe, institutional investors, national energy research laboratories and Federal and state energy agencies.

Alyra was founded in January 2004 by Mohammed Alam, following his energy banking career with Fortis Capital Corp., where he led a range of origination, structuring and restructuring of renewable and conventional power transactions. Before Fortis he worked at GE Capital's Capital Markets Group, focusing on structuring and advisory activities in the Latin American power and infrastructure sectors. Earlier, he started his finance career at Brown Brothers Harriman, focusing on emerging markets research. Mr. Alam holds a Master's in Public and Private Management degree with academic excellence award from the Yale School of Management and a BS, summa cum laude, from the University of Massachusetts. Mr. Alam has been invited as speaker at international energy conferences and he authored articles for leading energy publications.

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