CONTRACT AW-03

FINAL REPORT

August 30, 2006

Project Resources Corporation

Executive Summary

Project Resources Corporation (PRC) proposed installing 5.4 MW of wind generation capacity that would employ a new wind turbine model interconnected to the electric distribution grid in Southwestern Minnesota. The “S88” 1.8 megawatt turbines selected were new to the United States and promised to perform well in Midwest wind regimes. PRC also proposed attempting to employ a new form of project financing that would enable groups of farmers to invest in wind projects without exposure to the usual project development risks that often challenge farmers hoping to get involved in wind project ownership.

While there were numerous unexpected challenges encountered in the process of planning, financing, and constructing the projects, PRC believes that the end result exceeds that originally intended. Namely, the technology employed meets the intent of the contract, possibly better than the Enron Wind equipment originally contemplated, and the financing employed for the projects matches together several sources of Minnesota-based equity and debt that were not contemplated originally.

Key areas highlighted in this report are interconnection challenges and financing challenges. Conclusions and recommendations are made around such issues as distributed generation and non-conventional wind project financing.

Background

Project Resources Corporation (PRC) surveyed regional electrical distribution substations in 1999-2001 to explore the potential for distributed wind generation in Minnesota and identify likely candidates for distribution-connected wind generation projects. This process included distribution substations owned by both investor owned utilities and cooperative utilities. PRC identified several dozen distribution substations that appeared generally suitable for interconnection of wind projects of less than 10 MW.

RDF Contract

In August, 2001, PRC proposed to the Renewable Development Fund program the development of 5.4 MW of wind generation connected to distribution facilities. The generation was proposed as three 1.8 MW wind projects that would employ the new Enron Wind Corporation 900kW model turbine. PRC and Xcel Energy signed an RDF contract in February, 2002, allowing some flexibility for the turbine technology in consideration of the then apparent financial challenges facing Enron Wind Corporation and its mother company. The contract was amended in June of 2005 to slightly adjust schedules and include PRC reporting on a landowner investment concept intended as part of the projects by PRC, but not included in the original contract.

Grid Interconnection

PRC applied for interconnection and obtained preliminary interconnect studies in 2002 and 2003. Power sales agreements were negotiated with Xcel Energy and executed in August, 2003. Final interconnect studies were performed in 2004, and final interconnect agreements were signed in early 2005.

Examining potential interconnection points on the electrical distribution systems in Minnesota identified numerous challenges for interconnection to the utility distribution system. These included both: 1) technical challenges—such as bottleneck's in the capability of existing distribution and transmission systems to accept the wind generated electricity; and 2) tariff challenges—such as wheeling charges that are required when connecting to (or passing through) a separate utility jurisdiction. The size and age of existing infrastructure at prospective interconnection points also limited potential options. In general, the size of generator capacity proposed was too large for existing wires or other infrastructure and caused reliability or safety concerns. Ultimately, utility distribution engineers indicated that Xcel's distribution system near South Ridge distribution substation met safety and reliability criteria. Xcel also recommended upgrading the distribution substation to ensure protection of all parties. The final agreement was put in place to interconnect each of the wind projects near Xcel Energy's South Ridge substation in Southwest Minnesota.

Site Development

PRC acquired additional land and wind rights to augment land already under control, and contracted for environmental and meteorological analysis of the wind project sites between 2002 and 2005. These study results indicated that the prospective project sites were reasonable for the intended projects. In 2004-2005 PRC initiated design work for civil and electrical facilities and proceeded to obtain permits for construction of the projects.

Construction

PRC issued separate solicitations for wind turbine supply and construction services. PRC initiated construction of the projects in summer of 2005 and completed civil and electrical construction on schedule the same year (before the freeze). PRC contracted with Suzlon Wind Energy for three units of S88-1.8MW model turbine in mid-2005. This is a new model turbine with one unit operational in India. PRC staff traveled to India to examine the prototype S88 and tour Suzlon's manufacturing facilities.

Wind turbine equipment was delivered by Suzlon approximately three months behind schedule, in February 2006 rather than November, 2005. Delays were attributed to internal logistical failures by Suzlon. This required that the facilities would come online in late February, 2006, rather than late December, 2005. All three projects were operational on March 5th, 2006.

Photographs of Suzlon's facilities in India and project site construction are viewable at: www.projectresources.net/suzlon

Wind Turbine Technology

The Suzlon S88-1.8MW turbine model is a new model from the Suzlon company that incorporates two important advances on that company's prior product line: 1) increased overall turbine size (roughly 50 percent increase); and 2) inclusion of the "FlexiSlip" system for managing voltage flicker and mechanical loads. According Suzlon representatives, the S88 turbine design draws primarily on the company's smaller, but successful S64 design. One notable aspect of the S88 FlexiSlip system is that heat dissipation occurs outside of the nacelle (aft top deck) which should help prevent overheating during warm weather. This system is visible in photographs of the S88 nacelle at the website referenced above.

Financing

PRC also secured the necessary financing for the projects in 2005. PRC initially selected an international financing corporation ("Corp-A") for equity and debt financing of the projects in 2004. These negotiations ran long as a result of difficulty meeting Corp-A's threshold requirements for: 1) risk balance; 2) return on equity; and 3) long-term interest in the projects. Corp-A was essentially not interested in PRC's "landowner investment program” initiative and preferred to work only with PRC. This delay in securing the intended financing required that PRC terminate discussions with Corp-A and independently finance construction activities to ensure that the projects would not be delayed. PRC then issued a new solicitation to prospective financing sources and engaged an additional law firm to support these negotiations in mid-2005. After an array of meetings and negotiations PRC selected a group of Minnesota agricultural individuals and companies (“Corp-B”) as the intended investors in the wind projects. The parties worked together and crafted a financing structure that satisfied Corp-B’s requirements and enabled PRC to execute the landowner investment program after ten years of project operation. Corp-B also secured project debt through its existing banking relationships.

Information about the landowner investment program is available in Attachment A.

Operational Performance

Performance of the Suzlon S88 wind turbines was poor during the first five months of operation (March-June, 2006) but has improved in the most recent month. The following chart includes availability and production data for the three turbines:

Rock Ridge Project

	Production (kWh)	Availability
March	8	2.25%
April	411,669	63.68%
May	209,333	37.32%
June	155,189	26.03%
July	277,667	67.15%
August (through 28th)	325,633	97.19%
Total:	1,379,499	

South Ridge Project

	Production (kWh)	Availability
March	29	0.45%
April	92,261	19.14%
May	260,685	49.20%
June	344,114	81.73%
July	380,837	92.58%
August (through 28th)	339,981	97.41%
Total:	1,417,907	

Windvest Project

	Production (kWh)	Availability
March	13,827	67.88%
April	325,869	66.52%
May	559,394	80.18%
June	88,234	33.63%
July	339,952	84.84%
August (through 28th)	308,786	88.69%
Total:	1,636,062	

Findings

1. From an interconnection engineering perspective, the anticipated benefits of connecting 5.4 MW of wind generation to the distribution system were generally offset by potential negative impacts. This made the general concept more difficult to accomplish than was anticipated. Existing distribution facilities were generally designed to serve local electric customer load. Wind generation, even on a small scale, can quickly overwhelm the design limitations of existing distribution facilities. Complete redesign and rebuilding of such distribution facilities was required at some prospective sites to enable interconnection of the projects. These technical challenges were in several cases compounded by tariff requirements that added wheeling costs to project economics.
2. Securing financing for the projects that would enable the "landowner investment program" to proceed was difficult. Limited appetite for tax credits in the agricultural sector limits volume of investment possible from medium and small agricultural operators. In turn, there is very limited competition in the equity markets for this type of smaller projects.
3. The Suzlon S88 prototype operating in India performed well during PRC's visit and examination. The Suzlon manufacturing facilities appeared to be well organized with a good overall long-term plan that may be overly-aggressive in its focus on rapid growth. The company is financially sound and recently concluded a successful public offering on the Bombay stock exchange. The Suzlon S88 turbine technology delivered to Minnesota encountered substantial technical challenges during its first six months of operation resulting in low availability and production during this period. Most of the problems were related to electrical and/or software components of the turbines. Problems also resulted from poor assembly of the turbines and the lack of manufacturer-issued installation manuals (instructions for how to install the turbines). Lack of experience with the S88 resulted in a large number of challenges to getting the turbines operating reliably on site. Suzlon maintained a complete punch list of items to be rectified. In May, 2005, Suzlon indicated that they had a plan to wrap up their punch list by the end of July, 2005. Suzlon resolved most issues within five months and it appears reasonable to characterize most or all problems encountered as "bugs" that need to be "tweaked" out of the systems on this new model (as opposed to design flaws).
4. Suzlon sent personnel to the project site from all over the world repeatedly over a period of several months to ensure that the three S88 turbines were successfully installed and operational as soon as possible. It would not have been possible to complete the necessary work on these three S88 turbines without both the local staffing support already established by Suzlon, and the company's commitment to send senior engineering personnel from India, Germany, and other countries, to get the job done.

Conclusions

1. In general, installing wind generation on the existing electric utility distribution system may not be the most efficient or beneficial approach to interconnect wind generation on a large scale (For example, cumulative development of more than 100MW). The general design and intended function of the existing electrical distribution grid is in many cases simply not compatible with the scale of modern, utility scale wind turbine generators.
2. There may be an opportunity to maximize economic benefits from farmer investment in wind turbines if we could identify a model for pairing equity from the individuals and small businesses with the economies of scale and efficiencies of conventional wind plant development (i.e. larger projects with higher voltage interconnect facilities).
3. The S88 turbine appears to be a well-designed unit with a good company and good long term plan behind it. That said, Suzlon suffers from “growing pains” that show up in logistical failures.
4. Suzlon’s commitment to install operations and blade fabrication centers in Pipestone, Minnesota appear to be part of an overall plan by that company to establish a strong base in the region. These facilities will not only position Suzlon well to serve local markets for wind turbines, but they will also benefit the local economy. A letter from Suzlon describing that company’s plans near Pipestone, Minnesota is included in Attachment B.

Recommendations

1. Transmission planners should consider including 34.5kV (or lower) voltage bus work (or other infrastructure) at new or re-built 69kV (or higher) substation facilities in regions of Minnesota with reasonable potential for wind energy development. This might enable smaller generators to access the higher voltage grid rather than connecting to existing distribution systems that may be unable to support wind generation reliably.
2. Electric utilities should determine whether a pattern of widespread development of distributed smaller projects (<20MW) that add up to large scale development (>200MW) adds unique system benefits. The transmission costs and impacts related to this type of “distributed” development should be compared with those associated with centralized wind plants of 100MW or greater. This comparative analysis should be made under conditions where the region is generally transmission constrained, and when it is not. This topic could be taken up in Xcel’s studies of distributed generation currently ordered by the Minnesota Public Utilities Commission.
3. Department of commerce could facilitate a series of round table discussions with members of the local finance community to brainstorm concepts for farmer investment in large-scale wind plants.
4. Legislature could establish incentives for conventional wind developers to devise programs that will enable individual and small business investment in large-scale wind plants.

Attachment A

Landowner investment report (attached).

Landowner Investment Program:

Minnesota Windshare

May 30th, 2006

Project Resources Corporation

CONTENTS

INTRODUCTION

The objective of the “landowner investment program” was to combine a traditional form of wind project financing with a group of Minnesota investors that would normally not have access to ownership in a wind project.

Commercial developers and investors of large wind projects in California established a “flip” structure for financing wind energy projects in the mid-1990’s to match viable projects that lacked capital with equity investors seeking a 10 to 15 year position in wind projects. The basic principle was that the equity investors would provide capital, and in turn receive the majority of project proceeds for 10 to 15 years. One benefit of the flip structure was that it enabled the relatively cash-poor developer to maintain a small ownership interest in their projects that could be converted into a majority interest after a 10 to 15 year period. This model has been widely employed in the wind industry by developers that lack capital and/or appetite for tax benefits associated with the first ten years of wind project ownership.

The proposed “landowner investment program” would allow landowners, farmers, and other community members that do not otherwise have the ability to develop or own economic interest in wind energy projects to invest in a wind project that employs the flip structure that is commonly used by professional developers in the wind industry. This report will describe the ultimate ownership and financing structure that was employed and how it compares with more common forms of project ownership. Lessons learned will be discussed as well as some recommendations for further work on the subject.

COMMON OWNERSHIP STRUCTURES

The “flip” structure for matching equity investors with project developers has been widely used in the wind industry since the early 1990’s when it was employed to finance numerous large wind energy facilities in California. Medium and larger California developers employed a ten-year flip structure successfully at that time in order to maintain ownership of the projects they had developed while securing adequate capital and more fully leveraging the value of various tax benefits.

More recently, investors have employed the flip structure for small wind projects developed by Minnesota-based project developers. Most recently, farmers inexperienced with wind development have successfully developed wind projects (with the aid of experienced wind developer-consultants) that have employed a flip structure to finance their project construction and operation. This latter example of “farmer owned flip” financing enables an individual farmer (in many cases combined with an experienced wind energy development consultant) to effectively complete a wind project that may generate substantial income for the farmer after the equity investor and bank-debt are satisfied.

The following diagrams illustrate several generic aspects of the flip structure:

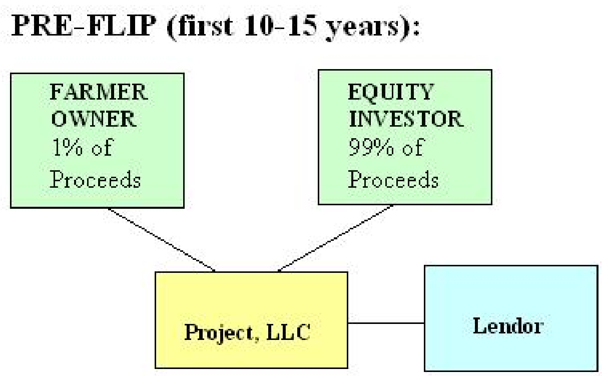

Figure 1: equity investor constructs and operates project for 10+ years (percentage of proceeds figures vary depending on project specifics).

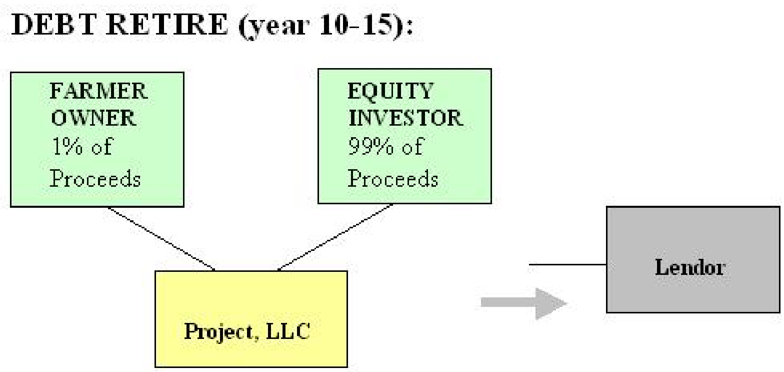

Figure 2: Debt will commonly be retired before a flip or redemption event is executed (but not necessarily).

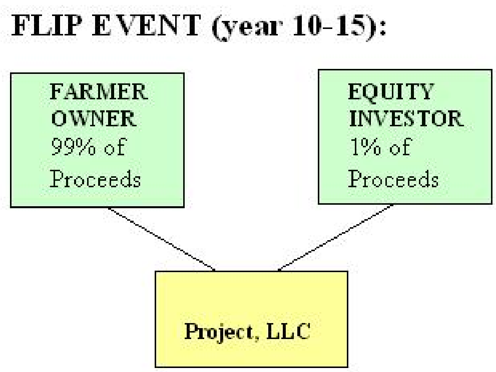

Figure 3: After debt is retired, execution of a "flip" as prescribed by the LLC operating agreements will adjust the proportions of proceeds flowing to equity investor and farmer owner.

It is possible for the project company to completely redeem the equity investor's membership interest at fair market value after 10 to 15 years. This is an alternative to flipping the allocation of proceeds.

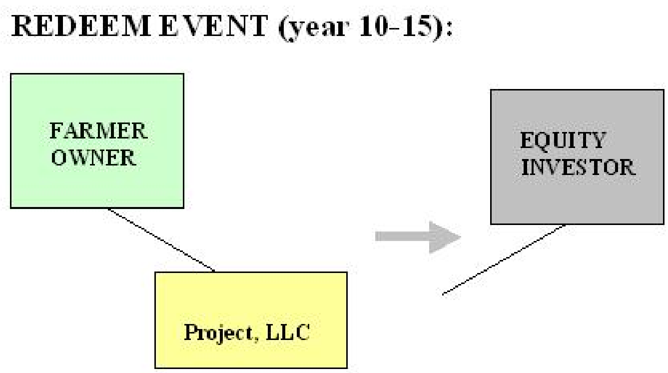

Figure 4: Alternate to the"flip" structure, redemption of the equity investor's interest would take out equity investor completely from ownership.

Various groups of Minnesota community wind developers have employed a model for group investment, or “cooperative investment” in wind projects, where dozens of farmers combine their own equity together with debt to fund project development and construction costs. One strength of this model is the relative simplicity of the structure where there is not an equity partner other than the local group of farmer investors. One weakness is the relative lack of economic efficiency that may result from limited appetite for tax benefits. Limited volume of capital available in the farming community, and lack of that community’s ability to meet security requirements currently associated with wind projects may be additional weaknesses of this model if investment is restricted to certain segments of the farming community. These apparent weaknesses have led these projects to seek cash subsidies to boost project economics. The first examples where this type of cooperative investment was employed to build and own a small wind project were the “MinnWind” 1 and 2 projects in Minnesota.

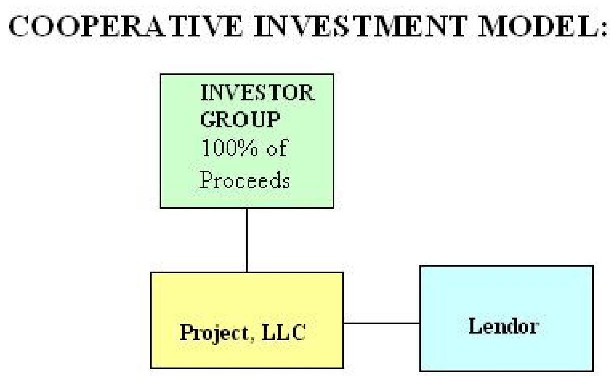

Figure 5: Cooperative investment by farmers without participation by an equity investor that has appetite for tax benefits may simplify project ownership and financing, but reduce economic efficiency.

“MN WINDSHARE” OWNERSHIP STRUCTURE

Financing and ownership of the Rock Ridge, South Ridge, and Windvest wind energy projects has been implemented to efficiently capture tax benefits with provisions to enable individuals from the community to purchase shares and earn return from the project. Preserving this ability for individuals from the community and around Minnesota to invest in these turbines provides a basis for the “landowner investment program” to proceed. While all aspects of the resulting financing that was employed were Minnesota-based, this was not necessarily required, as out-of-state equity investors could participate without compromising the rest of the program. The following description and diagrams provide a general overview of the project ownership and financing.

The program is structured with several levels of Minnesota investment:

1. CLASS-A Investors. Minnesota individuals and Minnesota farm corporations with substantial available capital and an appetite for a large volume of tax credits have purchased shares in each of the wind projects. Investment from these entities is spread over all of the projects to diversify operational risk and essentially blend the income from the three projects. These investors have leveraged their investment by securing debt that pays for more than 50% of the overall project cost. This debt will be fully retired by the projects before these investors interest in the projects is fully redeemed by the project company at the end of 10 to 15 years of operation. These investors are referred to as “Class-A investors”.
2. CLASS-B Investors. Landowners that host the turbines on their property through wind energy ground lease agreements have also purchased shares in each of the wind towers on their land. These individuals do not have an appetite for the relatively large volume of tax credits generated by the wind turbine projects. These investors will earn a very small percentage of the overall proceeds during the first 10 to 15 years of operation, after which period they will earn a larger portion of the overall proceeds. These investors are referred to as “Class-B investors”.
3. MN Windshare Investors. Individuals from the community that wish to own equity in the projects but who do not have the wind turbines on their property hold position on a subscription list that will afford them the option to invest in the projects when Class-A investor interests are redeemed. These investors are referred to as “Minnesota Windshare Investors”.

The Minnesota Windshare ownership structure developed by Project Resources Corporation and employed for these three wind projects incorporates aspects of both the “flip” and “cooperative” models for project ownership. This model could be referred to as a hybrid of those two ownership concepts, or generically as a “coop-flip” model for ownership. An equity investor funded the majority of the projects’ construction and operation, and will in turn receive the majority of proceeds for 10 to 15 years. Host landowners will receive a minority of proceeds for 10 to 15 years of operation, and upon redemption of the equity investor interest (Class-A units) will be joined by a larger group of community investors. PRC will maintain limited participation to coordinate the transition to MN Windshare ownership. The following diagrams illustrate the specific roles of the equity investors, the project site landowners, and the Minnesota Windshare investors in the projects:

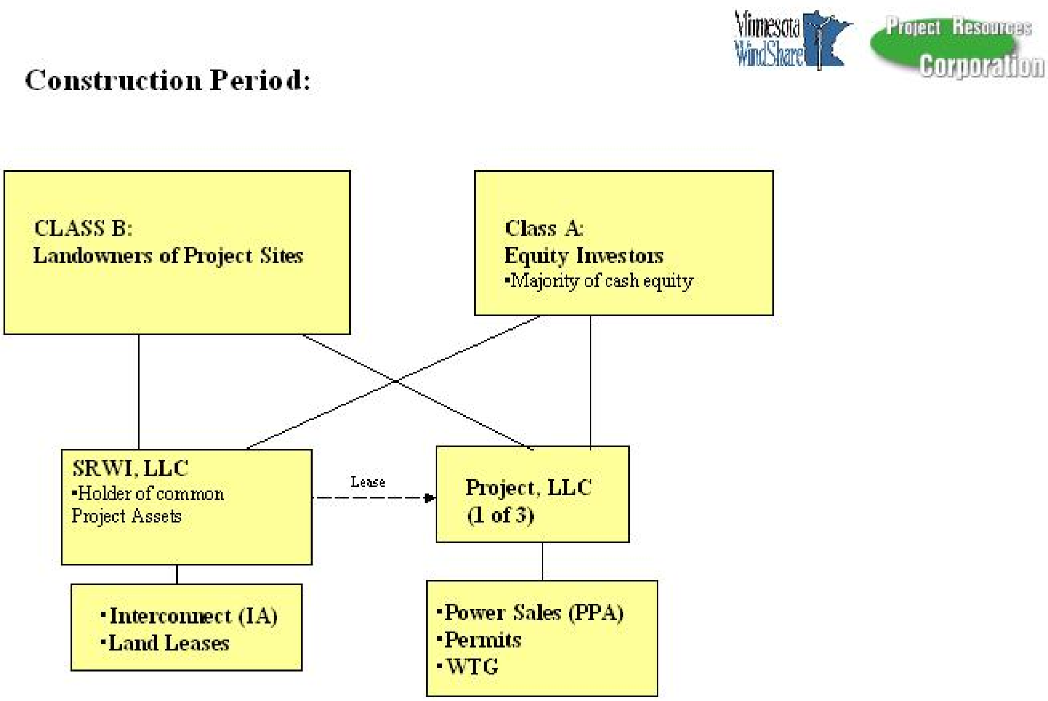

Figure 6: Class-A and Class-B membership units are issued to host landowners and equity investors.

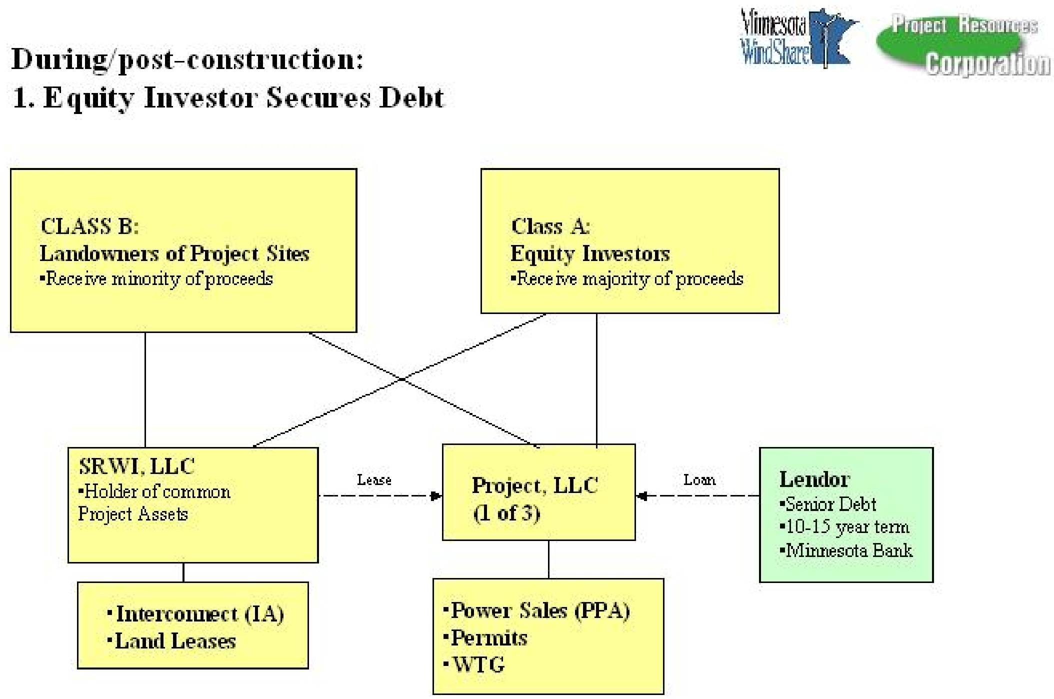

Figure 7: Class-A members secure project debt.

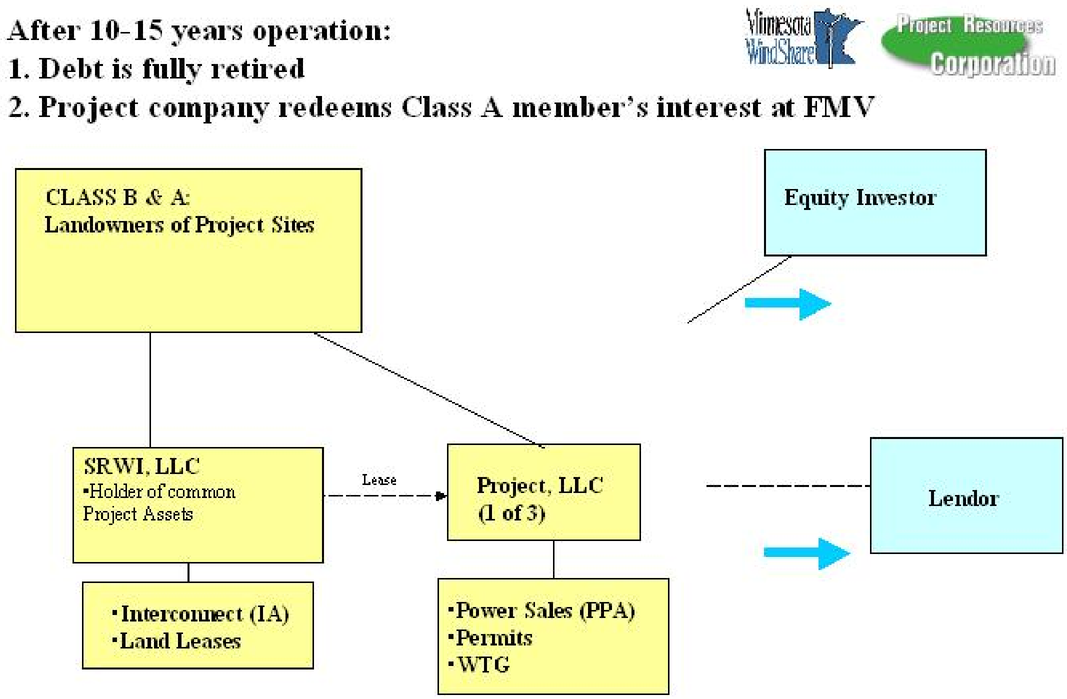

Figure 8: After 10-15 years of project operation the Project retires all debt and Class-A membership units are redeemed by the Project LLC's at fair market value.

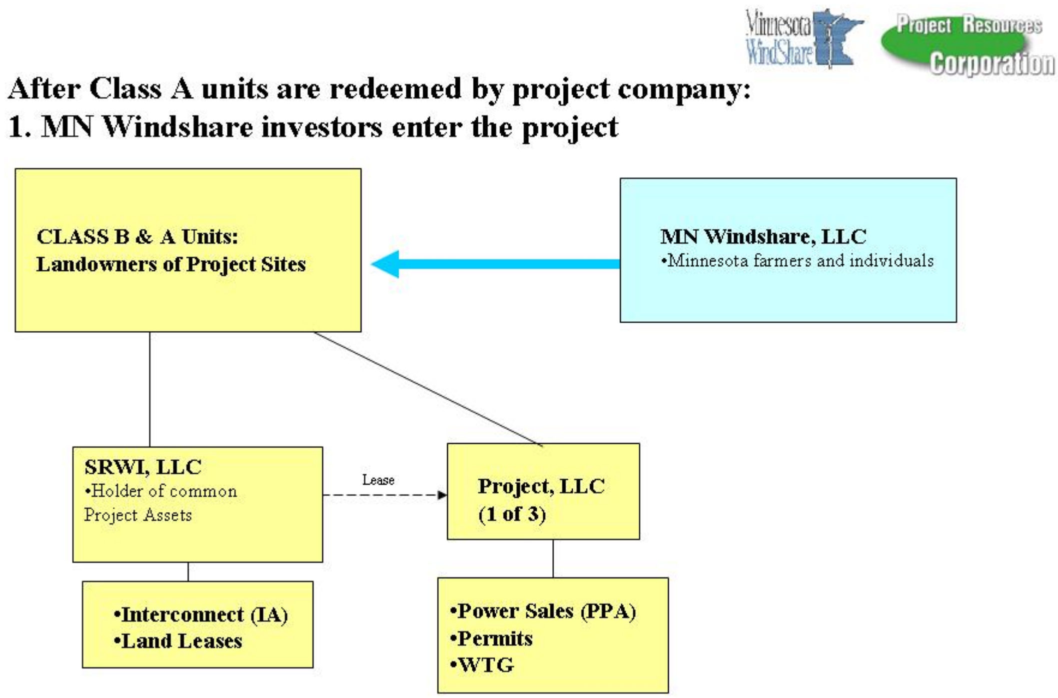

Figure 9: Class-B & Class-A member units are exchanged for membership in cooperative ownership company.

Final Ownership Structure:

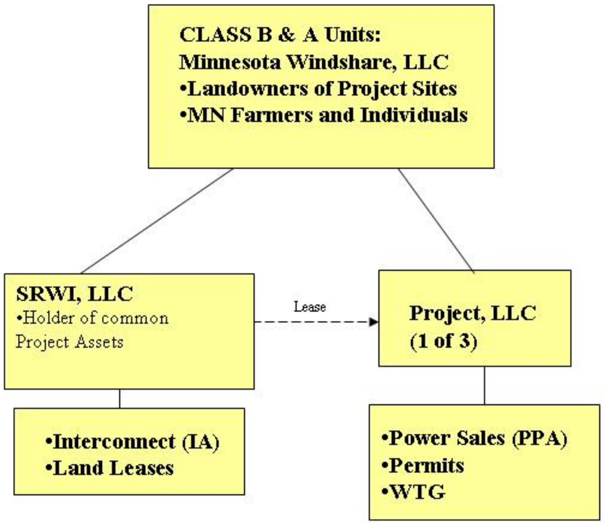

Figure 10: MN Windshare cooperative ownership LLC owns and operates projects for the duration of project life.

FINDINGS & LESSONS LEARNED

A dozen or so prospective equity investors expressed interest in the projects, varying greatly in their knowledge of wind energy investment, and also in their ability and willingness to meet local owner needs. At least one prospective investor was simply unwilling to accommodate an ownership structure necessary to enable the cooperative ownership after ten years.

Most prospective investors expressed limited knowledge of Federal tax law. We strongly recommend preparing a generic list of reference materials that can be made available to all prospective investors upon initial contact to cut through this issue as early as possible. The American Wind Energy Association is a good source of such reference materials (www.awea.org).

Prospective equity investors expressed a wide range of expectations regarding the risk that they expect a local project developer or community owners to carry during the first ten years (operational, legal, regulatory, and other risks, see Attachment 1). We found that some equity investors demand local owners to personally carry very high or even unlimited levels of project risk during the first ten years of operation. Most equity investors recognized a conventional wisdom that risk should be allocated to project owners according to their potential returns.

Prospective equity investors also had varying expectations for when and under what circumstances the ultimate "flip" event might be executed. While some potential equity investors were comfortable with fixing a date for a flip or redemption event, others preferred that the flip occur at a date triggered when they have received a certain level of return, thereby greatly reducing their investment risk. Aside from potentially running afoul of federal tax law, this approach again ignores the conventional wisdom that return is earned with risk.

In response to this diversity of investor expectations, we defined an ownership structure that we believed was reasonable and balanced, and that ensured the opportunity for local, community-based investors to participate. Key points include the following: 1) We structured the LLC operating & control agreements to ensure limited risk to the Class-B owners during the first ten years of operation; 2) We set a date after which the Project LLC's would redeem the Class-A members' interest at fair market value; and 3) We incorporated a mechanism that will enable a large group of Minnesota farmers and individuals to join the projects after the redemption of Class-A interest, thus achieving the original "cooperative ownership" structure goal.

One benefit to having established our intended ownership structure ahead of time was that we were able to fairly quickly identify investors that might fit the parameters we were looking for in equity investors. This enabled us to focus on prospective investors capable of making the investment work. The result was projects owned and financed by Minnesota companies and individuals, 100 percent.

DISCUSSION

These projects demonstrate that the cooperative/group investment model for project ownership can be integrated with the more traditional "flip" ownership structure. While this is a positive result, the projects remain small and lack the economic efficiency enjoyed by most large commercial wind plants. This is common in Minnesota where there has been a great deal of innovation in community ownership models for small wind projects. A major challenge remains—to find ways to pair farmer and individual investment in large-scale wind development.

Experience with pairing together small & local ownership with large scale wind plant development exists in a number of projects across the country where local/community investors or small project developers found ways to coordinate with wind development companies planning large wind projects in their area. Most of these examples have involved local, small projects that were able to "piggy-back" on the economies of scale of large-scale developments nearby. The following diagrams illustrate this approach:

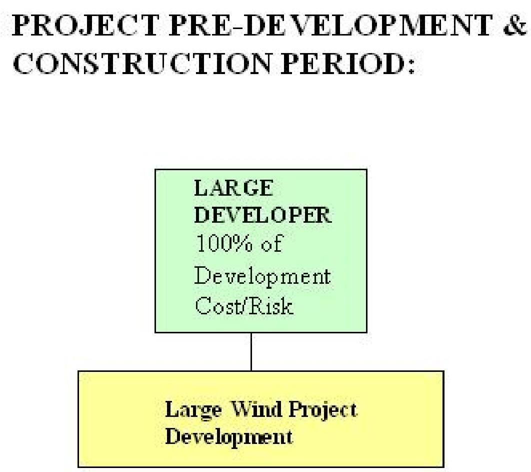

Figure 11: Commercial wind developer “business as usual” pre-development & construction of large wind energy project.

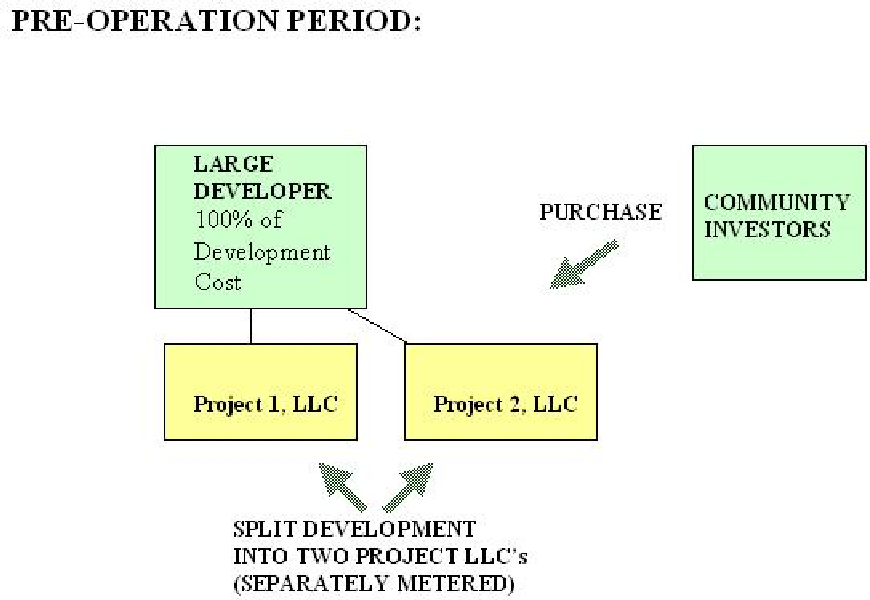

Figure 12: Wind developer establishes separate metering and LLC's for a portion of the overall development and sells that separate LLC (Project 2, LLC) to a community investor group at market value. Alternatively, a separate, local developer could develop the "Project 2, LLC".

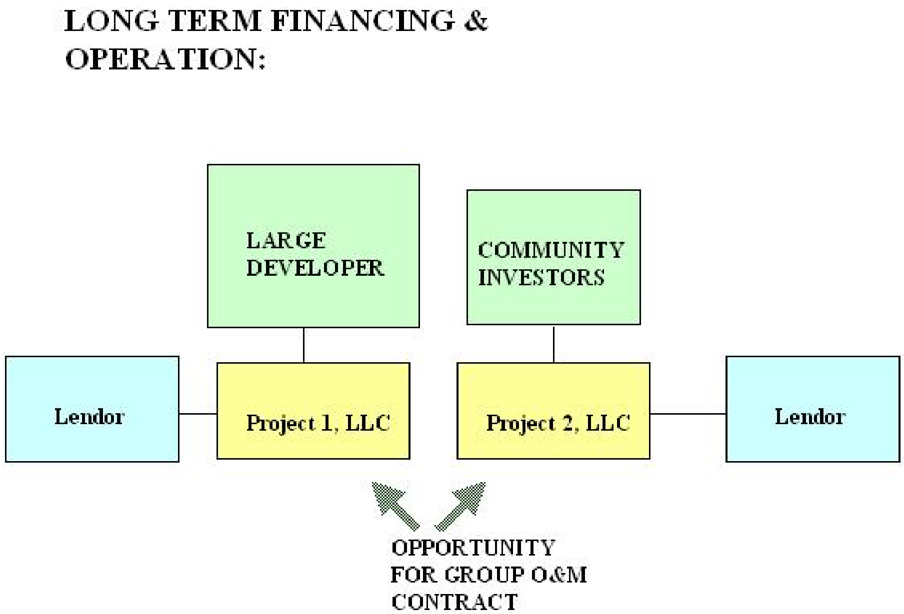

Figure 13: Community wind project and Developer wind projects are financed separately by their respective owners, but opportunities for economies of scale in operations & maintenance exist.

This approach to "piggy-backing" a small project on a large project can reduce development risk and introduce some economies of scale to the small project with keeping ownership and financing separate. There are very few examples of "piggy-backing" small project financing with large project financing.

The Minnesota Windshare model could be employed on a larger scale where a group of community members originate a project but lack appetite for tax benefits.

There may be an opportunity to increase the State-wide economic benefits from farmer and individual investment in wind projects if we can simply identify effective models for pairing large amounts of equity aggregated from the individuals and small businesses with the economies of scale and efficiencies of large-scale wind plant development. Such models could have greater economic benefits than simply increasing the existing incentives and supports for development of small-scale community-owned wind projects. Packaging large amounts of equity from farmers and individuals and matching that equity together with larger-scale wind project development—whether through this Minnesota Windshare model or otherwise—might improve competitiveness in turn limit reliance on subsidies. This would broaden the overall opportunity for farmer and individual investment in wind energy. Aggregating the investors and developing the right investment vehicle for their participation in projects is an area of innovation that should be supported.

Policymakers that wish to encourage farmer and individual investment in larger, more economic wind projects may want to establish incentives for discussion and innovation in the area of aggregating and packaging individual equity.

ATTACHMENT 1:

KEY AREAS OF RISK EXPOSURE

Wind projects are particularly sensitive to the changes in wind resource, turbine availability, and interest rates. The following chart illustrates the relative sensitivity to various risks and resulting impacts on the project:

Problem:	**Impact on Project:**	**Protection:**
Wind Energy Estimates incorrect →	Significant IRR Impact →	Use Industry accredited meteorologist
Turbine Reliability/Availability low →	Significant IRR Impact →	Obtain performance guarantees
Construction Cost Overrun →	Minimal IRR Impact →	Lock in firm price
Construction Liability exposure →	Significant Impact to Bankrupt →	Pass all risk to EPC supplier
PPA & Interconnect Agreement Terms not properly written →	Minimal Impact to Bankrupt →	Employ lawyer to review
O&M Costs above estimated →	Minimal IRR Impact →	Lock in firm price
PTC Qualification lost →	Bankrupt →	Obtain letter from IRS
MN Incentive Qualification lost →	Bankrupt →	Obtain letter from MN Dept. of Commerce

Attachment B

Suzlon Letter describing manufacturing plans in Pipestone, MN (attached).

SUZLON WIND ENERGY CORPORATION

SUZLON

September 8, 2006

Mr. Paul White
625 8th Ave. SE
Minneapolis, MN 55414

RE: Suzlon Blade Factory and Number of Employee Information

Dear Mr. White:

I have attached one of the press releases regarding Suzlon's blade production factory located in Pipestone, MN, as we discussed.

There are currently approximately 180 people employed by Suzlon Rotor Corporation to fabricate blades in Pipestone. Once all 3 blade lines are fully operational, producing a sufficient number of blades for about 600 MW per year, the number of employees is expected to reach approximately 300.

Regarding, Suzlon Wind Energy Corporation, which is Suzlon's North American subsidiary, by the end of the year there will be approximately 125 people employed, with the majority of people dedicated to operation, maintenance and installation of Suzlon wind turbines.

In total, Suzlon currently has over 200 employees in the Pipestone area, increasing to 300 plus employees during 2007 when blade fabrication reaches full capacity of 600 MW per year.

Sincerely,

David Capparelli
Director Business Development

City approves subsidy for Suzlon plant

Duane Winn

Action by the Pipestone City Council on Monday evening cleared the way for a corporate heavyweight in a light-as-air industry to build a plant here.

The city council unanimously passed a business subsidy agreement under the Minnesota JOBZ program that grants Suzlon Energy the necessary incentives to invest more than $14 million in a plant that will be built in an industrial park along Highway 75.

Also, the city council unanimously approved the sale of land to Suzlon as a tax write-down.

The Pipestone plant, Suzlon Rotor Corporation, will manufacture wind tower blades and generator cones. It will be a subsidiary of Suzlon Energy, India's leading manufacturer of wind turbine generators (WTG), with a 42 per cent market share. The parent company is also the world's sixth-largest WTG manufacturer in terms of annualised installed capacity for 2004.

The agreement calls for the city to sell 36.66 acres, worth $258,411, for $1 to Suzlon, and extend additional tax exemptions under the JOBZ Act.

Monday evening's actions, said City Administrator/City Attorney Jeff Jones, represented the final step in the long process in the city's negotiations with Suzlon.

Jones said the negotiations between the city of Pipestone and Suzlon Energy took 19 months to come to fruition.

The long process, said Jones, was worth all the effort.

“In the long term, there will probably be benefits that we can't imagine,” he said.

The plant is expected to create between 100 and 200 jobs. Reginard Fraley, a development consultant for Suzlon, said the plant will need a minimum of 40 workers to get things going.

The JOBZ agreement calls for Suzlon to create a base of 23 jobs in order to receive tax exemptions from the state of Minnesota.

The city of Pipestone will be contributing $10,000 to Minnesota West Community and Technical College for the development of Phase 1 job training for Suzlon Rotor Corporation. The college is also asking $15,000 from Pipestone County.

In the first phase, Suzlon will need 40 trained employees by March 2006.

Suzlon is contributing $119,400 of the $169,000 that is required for this first phase of training.

The start-up phase will include the transportation of selected trainees to Suzlon's training facility in Pune, India. They will return to the area to train more workers.

The second and third phases of training are designed to ready the remainder of the 120 employees who will be needed when the facility will be in full production in October 2006.

This training development will join the college's online wind energy certificate program and its associate of applied science degree wind energy program located in Canby.

"Combined with our ethanol training program, we now have a distinct advantage in the region to draw business and industry related to all facets of renewable industry to southwest Minnesota," said Ronald Wood, president of Minnesota West Community and Technical College.

Ronald Wood said Suzlon's presence in the region means this region may be "turning the economic growth corner."

According to the American Wind Energy Association, "Up to 2,500 megawatts of wind energy capacity are scheduled to come online in the U.S. this year, bringing new power to the equivalent of 700,000 homes and injecting over $3 billion of investment into the power generation sector."

Wood also cited some of the renewable energy sector successes that have sprung in this and adjacent regions:

- The Lake Benton Minnesota Wind Project, completed in 1999, created 240 construction jobs and as many as 28 operations and maintenance jobs.

- The Storm Lake Iowa Wind Farm Project created 150 construction jobs and 20-30 operations and maintenance jobs.

"The Suzlon Minnesota Wind Farm Project outlines plans for 12 wind farms located on 12 sites in addition to the construction of the blade and tower manufacturing plant in Pipestone," said Wood.

A groundbreaking ceremony involving Suzlon and city and state officials is scheduled for Tuesday, Oct. 11, in Pipestone.

Suzlon is hoping to break ground yet this fall so that the rotor blade manufacturing unit will become operational by spring 2006.

The subsidy agreement was approved after a pubic hearing which yielded no comments from community members.