# Application

Project Title: Spirit Lake Nation Wind Farm

**Applicant:** Spirit Lake Tribal Nation

**Project Representative: Frank Black Cloud** 

Principal Investigator: Baker Tilly Virchow Krause, LLP

Date of Application: May 1, 2010

Amount of Request: \$120,000

Total Amount of Proposed Project: \$210,000,000

\*Matching Eligible Costs for which this

grant application is being requested: \$240,000

Duration of Project: Ongoing through June 24, 2012

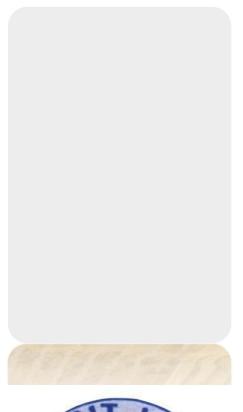
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Renewable Energy Program

North Dakota Industrial Commission

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#### **ABSTRACT**

# **Objective:**

The Sprit Lake Native American Nation is currently in the initial development phase of a utility-scale wind farm on tribal land near Devils Lake, North Dakota, with the objective of fully developing, constructing, owning, operating, and maintaining a 100 MW wind farm which will generate renewable energy to help meet the State of North Dakota's current and future Renewable Portfolio Goals.

# **Expected Results:**

Once complete, this 60+ turbine wind farm will generate at least 350 million kilowatt hours (kwh) of electricity annually, enough to power 31,818 homes. This electricity will be sold into the Midwest ISO energy grid for distribution with a power purchase agreement (PPA) with desired preference given to a North Dakota-based utility.

#### **Duration:**

Subject to the results of the initial MISO transmission feasibility study, which will commence on May 10, 2010, it is anticipated this project could be in commercial operation by December, 2012. If the results of the MISO feasibility study indicate a situation of constrained transmission in the project area, this project operational date will likely be delayed approximately one year.

# **Total Project Cost:**

The project financial due diligence, fatal flaw analysis, and development stage work for which this grant request is being applied for is anticipated to total \$1,362,900. The total estimated project cost, assuming a 100 MW project, is anticipated to be approximately \$210,000,000.

# **Participants:**

Participants in this project include:

- Spirit Lake Tribal Nation
- Baker Tilly Virchow Krause, LLP (Financial advisors and Project Management)
- Michael, Best & Friedrich (Legal Advisors)
- WES Engineering (Preliminary Engineering Activities)
- General Electric (Turbine Supplier, Technical Support, and potential project funding source)
- General, or "Balance of Plant" Contractor (to be determined based on a competitive bidding process).

#### **PROJECT DESCRIPTION**

# **Objectives:**

The Spirit Lake Tribe reservation was established in 1867. The Reservation, located in East Central North Dakota, covers approximately 405 square miles and has as its major surface water feature Devil's Lake which comprises 90,000 acres of area stretched over 200 miles. The total population within the Spirit Lake Tribe boundaries is 6,223. The tribal nation believes in utilizing the earth's natural resources, including wind.

Bringing wind energy into this North Dakota system makes sense environmentally as well as economically. It has been established that wind energy power plants can compete very well with new natural gas-and fossil-fuel-fired plants. Wind energy power plants also provide approximately 66% more jobs than natural gas-fired plants and 27% more jobs than coal-fired plants.

It is documented that North Dakota has wind energy potential among the greatest in the United States. It is estimated that the wind energy available in North Dakota alone would meet up to 45% of the annual U.S. electricity demand.

The Spirit Lake Nation investigated the energy potential that exists above its reservation lands. In November 1993, seven meteorological towers were installed on the reservation. Wind data were collected at multiple elevations ranging from 50 to 225 feet. The data collected indicated wind energy potential as good as that of the best California wind farms. In 1996 a test turbine was successfully installed outside of the tribal casino and, with the knowledge and experience from the project, the tribe would like to proceed with development of a utility scale wind farm.

The primary goals and objectives of this wind energy project are as follows:

- To utilize previously acquired wind performance data along with newly acquired data in part funded by this potential grant, economic assessment results and operating experience to deploy 60+ utility-grade wind turbines on tribal land.
- To correlate the wind data with local demand for electricity in order to better determine the economics of other large-scale wind farms in North Dakota.
- To provide hands-on experience for students, researchers, political leaders, utilities, and tribal planners with regard to large-scale wind farm development in North Dakota.
- To provide a focal point for educational programs at Little Hoop Community College through technical training, business training, and environmental studies.
- To initiate and strengthen essential working relationships between tribal members, the local community college, as well as state, federal, utility, energy research, and commercial development agencies.
- To further incent transmission companies such as ITC Holdings Corporation to aggressively
  pursue additional transmission projects such as the "Green Power Express", which will enable
  the construction of additional wind farms in North Dakota and allow more North Dakota wind
  power to be delivered to other load centers in the Midwest.

#### Methodology:

The methodology needed to make this project a success will be extrapolated from a previous smaller scale implementation described above. With this knowledge and the partnership with Baker Tilly Virchow Krause, who is involved in over 10 different wind farm development projects across the US in various phases, Spirit Lake Nation will follow the phase and Gantt chart descriptions provided (Appendix A - "Baker Tilly Virchow Krause Project Gantt Chart") to satisfy the various required processes. The process will be followed in such a manner that allows for informed decision making by the Spirit Lake Nation at critical "go/no go" milestones for the project so that development capital (and potential grant funding) is utilized in the most efficient manner possible.

#### **Anticipated Results:**

It is expected, with milestones achieved in accordance with the timetable provide on page 9 of this application as well as Attachment A - "Baker Tilly Virchow Krause Project Gantt Chart", by December, 2012 the Spirit Lake Nation will have a commercial scale operating wind farm with over 60 wind turbines generating approximately 350 million kilowatt hours (kwh) of clean electricity.

#### **Facilities:**

The majority of work to be completed by Spirit Lake Nation tribal members on this project will occur at existing tribal facilities. For the third party resources, work will be completed on a combination between project location and respective office locations based on project criteria and needs. It is a goal of the Spirit Lake Tribe to eventually construct an educational facility on-site at the wind farm for educational purposes.

#### **Resources:**

To accomplish this project, Spirit Lake Nation will need to devote at least \$862,900 in cash (if this grant request is funded to requested amount) and substantial personnel time to see the project through to completion. To date, the Spirit Lake nation has already incurred well over \$100,000 in development expenses to allow the project to proceed according to necessary timelines. In addition, the Spirit Lake Nation will rely on the resources and expertise of its partners outlined in the Abstract and Background/Qualifications sections of this grant application to ensure the project the highest likelihood of success.

#### **Techniques to Be Used, Their Availability and Capability:**

While some project activities that have been facilitated and funded by the Spirit Lake nation are already underway, most of the work that remains to be performed will be executed by reputable 3<sup>rd</sup> party consultants in their respective discipline (for example, meteorological tower erection, avian and bat review, environmental studies, geotechnical work, permitting). This work will be competitively sourced by Spirit Lake nation with assistance from Baker Tilly, with a view to involve as many eligible and reputable North Dakota firms in the bidding process for the specific tasks.

#### **Environmental and Economic Impacts while Project is Underway:**

During the project financial due diligence, fatal flaw analysis, and development stage, most of the work will be performed on site or at a "desktop level". As previously noted, 3<sup>rd</sup> party consultants and service providers located within the State of North Dakota that are need for specific tasks during this phase will be given strong consideration. There will be no tangible environmental impact while the project financial due diligence, fatal flaw analysis, and development stages are underway.

Once the project is "shovel ready" environmental impacts to consider while the project is underway include a need for the creation of infrastructure (access roads, underground electricity lines, substations, etc). It should be noted the initial carbon dioxide emission from energy used in the installation of the Spirit Lake Nation wind farm is anticipated to be "paid back" within about 9 months of operating turbines.

The economic impacts of this wind project while under construction were found utilizing the National Renewable Energy Laboratory's Jobs and Economic Development Impact (JEDI) model to calculate job creation and economic output figures. According to this model, it projects that the 100 MW project would create close to 562 direct local jobs during the construction period. See Table 1 below for a summary breakdown.

#### **Ultimate Technological and Economic Impacts:**

Once this project is complete, some of the technological impacts to consider range from a report outlining the structural makeup of the system for others to use to the goal of eventually constructing an educational facility on-site at the wind farm for educational purposes.

The economic impacts of this wind project while under construction were found utilizing the National Renewable Energy Laboratory's Jobs and Economic Development Impact (JEDI) model to calculate job creation and economic output figures. According to this model, it projects that the 100 MW project would create at least 18 direct operations and maintenance jobs during each year of the project's life. Please see Table 1 below for a summary breakdown.

Table 1: Local Economic Impacts - Summary Results

	Jobs	Earnings	Output
During construction period			
Project Development and Onsite Labor Impacts	68	\$3.77	\$4.57
Construction and Interconnection Labor	60	\$3.40	
Construction Related Services	8	\$0.37	
Turbine and Supply Chain Impacts	359	\$12.04	\$41.82
Induced Impacts	135	\$3.77	\$12.16
Total Impacts	562	\$19.58	\$58.54
During operating years (annual)			
Onsite Labor Impacts	6	\$0.37	\$0.37
Local Revenue and Supply Chain Impacts	7	\$0.22	\$1.13
Induced Impacts	5	\$0.14	\$0.45
Total Impacts	18	\$0.74	\$1.96

Notes: Earnings and Output values are millions of dollars in year 2010 dollars. Construction and operating jobs are full-time equivalent for a period of one year (1 FTE = 2,080 hours). Wind farm workers includes field technicians, administration and management. Economic impacts "During operating years" represent impacts that occur from wind farm operations/expenditures. The analysis does not include impacts associated with spending of wind farm "profits" and assumes no tax abatement unless noted. Totals may not add up due to independent rounding. Results are based on model default values.

Source: National Renewable Energy Laboratory JEDI model (http://www.nrel.gov/analysis/jedi/download.html)

#### Why the Project is Needed:

The genesis for the concept of a utility scale wind farm located on the Spirit Lake reservation comes from the realization by the tribal council that the best way to ensure the economic sustainability of future generations of tribal members was to utilize an existing and unlimited local resource that could be tapped, wind power.

Additionally, the tribal council sees a need to diversify revenue of the tribe outside of its hospitality and gaming operations. Spirit Lake Nation has an over age 16 labor force of approximately 2,100 persons. Of these residents, approximately 565 or 24.5% are employed full-time. Twenty percent of tribe residents are unemployed. Professional, laborer, full-time student, and service worker were the most common occupations. Spirit Lake has a relatively high percentage of employees classified as laborer and semi-skilled tradesmen.

Demographic data indicates that the majority of those unemployed and looking for work lack proper education and marketable skills. A large number of reservation residents lack formal education beyond high school. Approximately 25 percent of residents in the work force make less than \$10,000. While nearly 40 percent make less than \$25,000. A project such as this utility scale wind operation will provide for substantial opportunity for these individuals.

Spirit Lake Nation also needs to complete this project because it can provide a footprint or template to educate others in the state of North Dakota, particularly tribal entities, how to harness the unlimited resource of wind. The monetary advantages of wind-generated electricity continue to increase as the cost of production is continually decreasing. In addition, a project of this type creates electricity from a renewable resource to be distributed without producing any pollution.

#### STANDARDS OF SUCCESS

Standards of Success should include: The measurable deliverables of the project that will determine whether it is a success; The value to North Dakota; An explanation of what parts of the public and private sector will likely make use of the project's results, and when and in what way; The potential that commercial use will be made of the project's results; How the project will enhance the education, research, development and marketing of North Dakota's renewable energy resources; How it will preserve existing jobs and create new ones; How it will otherwise satisfy the purposes established in the mission of the Program.

- The State of North Dakota currently has a voluntary Renewable Portfolio Goal of achieving 10% of the state's energy via renewable energy sources by the year 2015 (source: US EPA Renewable Portfolio Standards Fact Sheet <a href="http://www.epa.gov/chp/state-policy/renewable\_fs.html">http://www.epa.gov/chp/state-policy/renewable\_fs.html</a>).
   Once this project is complete, it will be a major step forward in accomplishing this RPS goal.
- 2. As outlined in the Project Description section, this project will likely add approximately 385 jobs (directly and indirectly) during construction and maintain about 32 employees (directly and indirectly) for employment going forward.
- 3. The results of this project will be published for other parties in the state to use as a resource should they choose to pursue commercial-scale wind operations as well. The goal of our detailed project reporting will be to share insight on how future projects of similar nature could be accomplished.
- 4. Spirit Lake Tribe will provide a hands-on experience for students, researchers, political leaders, utilities and tribal planners with regard to large-scale wind farm development.
- 5. The tribe will offer to share educational programs at the Little Hoop Community College through technical training, business training and environmental studies.
- 6. Once accomplished, this project will be another positive example of how tribal nations can work mutually with all levels of governmental agencies to achieve a common goal in reducing our permanent footprint on the earth.

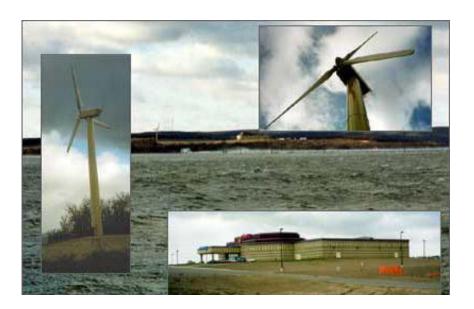
# **BACKGROUND/QUALIFICIATIONS**

Please provide a summary of prior work related to the project conducted by the applicant and other participants as well as by other organizations. **This should also include summary of the experience and qualifications pertinent to the project of the applicant, principal investigator, and other participants in the project.** 

Spirit Lake Tribal Nation has worked towards harnessing the natural benefit of wind power since the early 1990's. The Tribe identified a need for undertaking a smaller scale project in order to gain the knowledge and expertise with hopes of creating a large utility scale wind farm in the future. As a result, in 1996 a Micon-108 wind turbine was purchased from an existing wind farm in California and installed outside of the tribal casino as an educational demonstration component. Since the install, invaluable operating experience, industry knowledge and Wind-smith training has been gained.

Power from the successful Casino wind turbine project has been supplied to the Spirit Lake Casino for years. The annual wind turbine production is approximately one fourth of the total energy required by the Casino. Because the Casino's demand is typically more than 400 kW, and the wind turbine capacity is 100 kW, virtually all of the electricity produced is consumed by the casino.

Shown below is the image of the successful wind turbine project outside of the Tribe's casino facility.



Please see Attachment B — "US DOE SLN Casino Wind Project" for the US Department of Energy's project description of this successful wind turbine install.

The other partners in this proposed project bring a wealth of knowledge and resources to aid the tribe. Summarization highlights by partner pertaining specifically to this project are:

# Baker Tilly Virchow Krause, LLP (Financial advisors)

- Company Background
  - In addition to traditional audit and tax services, Baker Tilly brings non-traditional expertise to help clients manage issues specific to renewable energy and sustainability initiatives:
    - Thirty years of experience in energy and utilities industries, nationwide consulting and accounting practice
    - Proven ability to help clients leverage international, federal, state, and local incentives/tax credits
    - Established investment banking practice since 1999
    - Established management consulting practice since 1997
- o Experience
  - Projects ranging from 5 200+ MW in over 15 states
  - Closed or active engagements with 10 wind developers

# Michael, Best & Friedrich (Legal Advisors)

- Company Background
  - Nationally recognized renewable energy practice
  - One of the Midwest's oldest and largest law firms founded in 1848
  - More than 250 attorneys
  - Top level American Wind Energy Association sponsor (2007)
- Experience
  - Negotiated numerous power purchase agreements, construction contracts and interconnection agreements.
  - Engaged to work on wind projects representing approximately 1,275 MW

# WES Engineering (Electricity Interconnect Engineering)

- Experience
  - Over nine years experience in commercial-scale wind development ranging from 660kW to 300 MW.
  - Turbine operations for two 12 MW wind projects
  - Site work studies completed in Turbine Production Estimates, Noise Studies, Turbine Visual Simulations, etc

# **General Electric (Turbine Supplier & Technical Support)**

# Company Background

 One of the world's leading wind turbine suppliers with over 13,500 turbine installations worldwide comprising more than 218 million operating hours and 127,000 GWH of energy produced.

#### Experience

- More than 20 years of wind industry experience with manufacturing and assembly facilities in the United States, German, Spain, China and Canada.
- Current portfolio includes wind turbines with related capacities ranging from 1.5 to 3.5 MW and support services ranging from development assistance to operation and maintenance.

#### **MANAGEMENT**

A description of **how** the applicant will manage and oversee the project to ensure it is being carried out on schedule and in a manner that best ensures its objectives will be met, **and a description of the evaluation points to be used** during the course of the project.

Spirit Lake Nation has entered into an engagement with Baker Tilly Virchow Krause, LLP to manage this project up to the point of start of construction. Baker Tilly has the experience and successful track record to see this project to its successful completion.

A logical series of evaluation points, or milestones, could be described as follows:

# 2010

Submit for Midwest ISO Transmission Feasibility

Erect Meteorological Towers to Collect Wind Data

May 15<sup>th</sup>

Learn Results of the MISO Feasibility Study

May 28<sup>th</sup>

Enter MISO Definitive Planning Phase

August 9<sup>th</sup>

Power Purchase Agreement Procurement

December

2011

12 months of Wind Data Collected May 15<sup>th</sup>

MISO Interconnection Agreement July

Complete Micrositing/Geotechnical Work September

Complete Required Environmental Studies October

Complete Project Financing December

2012

Start Construction January

Place Project into Service December

As referenced earlier in this application, Appendix A "Baker Tilly Virchow Krause Project Gantt Chart" consists of a complete anticipated project schedule. This detailed Gantt Chart project outline illustrates specific steps on how Spirit Lake Nation will complete the project on schedule.

#### **TIMETABLE**

Please provide a project schedule setting forth the starting and completion dates, dates for completing major project activities, and proposed dates upon which the interim reports will be submitted.

A complete anticipated project schedule can be found in Appendix A "Baker Tilly Virchow Krause Project Gantt Chart." It would be suggested that Spirit Lake Nation complete project update interim reports outlining activities completed and project progress quarterly, along with a quarterly conference call with grant program officials, to review progress and discuss activities for the subsequent quarter.

#### **BUDGET**

Please use the table below to provide an **itemized list** of the project's capital costs; direct operating costs, including salaries; and indirect costs; and an explanation of which of these costs will be supported by the grant and in what amount. The budget should identify all other committed and prospective funding sources and the amount of funding from each source. **Please feel free to add columns and rows as needed.** Higher priority will be given to those projects have matching private industry investment equal to at least 50% or more of total cost.

Project Associated Expense	NDIC's Share	Applicant's Share (Cash)	Applicant's Share (In-Kind)	Other Project Sponsor's Share
\$1,362,900	\$120,000	\$1,242,900	1560 hours*	NA

<sup>\*</sup>Assumes 15 hours of project management and execution per week over the next 104 weeks.

Please use the space below to justify project associated expenses, and discuss if less funding is available than that requested, whether the project's objectives will be unattainable or delayed.

The breakdown on the following page describes the anticipated development level expense for the project. If less funding is available than requested, getting through the project development steps a putting together a true "shovel ready" project will likely require the addition of another equity investor, which will be challenging to procure, and will almost certainly delay the project.

Upon completion of all pre construction activities, Spirit Lake Nation will engage Baker Tilly Capital to procure traditional project debt and equity funding, currently anticipated to be approximately \$210,000,000.

Phase I Expense				
Preliminary Transmission, In	erconnec	tion, Load	Flow Study	\$10,000
Preliminary Wind Resource I	Estimate			\$15,000
Met towers at new project loc	ation			\$50,000
Interconnection Request/MIS		easibility S	Study	\$5,000
Fund System Impact Study				\$60,000
Fund Definitive Planning Pha	se			\$210,000
GIS Screening Mapping				\$2,500
Avian, Bat, Preliminary Revie	w/Study			\$4,000
Threatened/Endangered Spe	cies Mapp	ing		\$5,500
Historic Site Preservation Lite	erature Re	eview		\$6,000
Sound Study				\$24,000
Shadow Study				\$22,000
Microwave Beam Path Analys	sis			\$4,000
DOT Tall Tower Permit				\$6,000
3rd Party Wind Resource An	alysis Incl	uding Ene	rgy Production Estimates	\$40,000
Wetland/Waterway Complian				\$10,000
US ACE Section 404 Clean V				\$5,000
Army Corp of Engineers Perr				\$5,000
Water Quality Standards Rev				\$3,000
Storm Water Discharge Perr				\$12,000
Phase I Environmental Study				\$15,000
Building Permits				\$5,000
Driveway Permits				\$7,000
DOT Delivery Route and Train	nsportatio	n Planning	1	\$6,000
Geotechnical Feasibility				\$70,000
NTIA Review				\$22,000
Interconnection and Collector	System F	- easibility	Study	\$75,000
PPA Procurement Assistance	\$50,000			
PPA Procurement Negotiation and Execution Assistance (MB)				\$80,000
Interconnection Agreement Negotiation and Execution (MB)				\$20,000
Land Lease Option Payments (Anticipated Additional Payments)				\$20,000
Baker Tilly Assistance As Required Per "Phase I" Engagement				\$40,000
Additional Baker Tilly Assista			gagee	\$100,000
Site Control Documentation (		quirou		\$20,000
Turbine Supply Agreement N				\$80,000
Balance of Plant Contract Ne	_			\$30,000
Financing/Loan Document No		and Revie	PW/	\$80,000
Project Level Funding Procur		and revie		\$20,000
Basic Engineering	Carrotte			Ψ20,000
Detailed Engineering				
Subtotal				\$1,239,000
Contingency @ 10%				\$123,900
Total				\$1,362,900

#### **CONFIDENTIAL INFORMATION**

Any information in the application that is entitled to confidentiality and which the applicant wants to be kept confidential should, if possible, be placed in an appendix to allow for administrative ease in protecting the information from public disclosure while allowing public access to the rest of the application. Such information must be clearly labeled as confidential and the applicant must provide all required information set forth in NDCC 54-63-02. If there is no confidential information please note that below.

There are no confidentiality issues in regards to this grant application.

# PATENTS/RIGHTS TO TECHNICAL DATA

Any patents or rights that the applicant wishes to reserve must be identified in the application. If this does not apply to your proposal, please note that below.

There are no patents or rights to technical data pertaining to this grant application.

# **Renewable Energy Program**

# **North Dakota Industrial Commission**

**Supplement to Grant Application Dated May 1, 2010** 



Further Detail Regarding Grant Request Capital Budget
May 16, 2010

**Preliminary Transmission, Interconnection, Load Flow Study.** This is a study performed by a third party electrical engineering firm to determine the availability of transmission in the project area that could potentially be sent to the grid from the wind farm. This task is performed early in the development cycle to assess project viability and timing to completion (if transmission upgrades are needed).

**Preliminary Wind Resource Estimate.** This is a study performed by a third party company to assess the wind resource in the project area and recommend placement of meteorological towers to measure actual wind speeds. Additionally, the information derived from this study will allow a preliminary economic model to be generated for the project to further determine viability.

**Met towers at New Project Location.** This is two 60 meter towers that would be erected to measure actual wind speeds at the project location. Lenders require at least one year of actual wind data measured in this fashion before they will considered borrowing money.

**Interconnection Request/MISO Feasibility Study.** This is the first step in proceeding through the Midwest ISO transmission queue. Midwest ISO controls transmission availability over a multistate region and an interconnection agreement with Midwest ISO is the final step to guaranteeing transmission availability to move the project's power onto the grid to a third party customer.

**Fund System Impact Study.** This is the second payment due to Midwest ISO to fund their Definitive Planning Phase. Midwest ISO requires this to cover their costs of analyzing the project's impact on the transmission system, and this is a much more definitive study than the initial feasibility study.

**Fund Definitive Planning Phase.** This is the third and final payment due to Midwest ISO to fund the remainder of their Definitive Planning Phase described above, for a 100 MW project.

**GIS Screening Mapping.** This is performed by a third party engineer which will provide an initial layout for the project site in "GIS" file format, which will be able to be utilized as a basis for project planning beyond this step.

**Avian/Bat Preliminary Review/Study.** This is a preliminary review by an environmental consulting firm to evaluate the project area for risks related to migratory bird and bat migration patterns.

**Threatened/Endangered Species Mapping.** This is a preliminary review by an environmental consulting firm to evaluate the project area for risks related to threatened and endangered species.

**Historic Site Preservation Literature Review.** This is a preliminary review by an archeological consulting firm to evaluate the project area for risks related historic places or artifacts that would prevent the project from being constructed.

**Sound Study.** This is an evaluation by a third party expert of the ultimate wind turbine placement to ensure proper distance from inhabited structures per the agreed upon ordinance.

**Shadow Study.** This is an evaluation by a third party expert to ensure that an effect from wind turbines called "shadow flicker" is mitigated as it relates to turbine placement near any occupied dwellings

**Microwave Beam Path Analysis.** This is third party study to determine/ensure that the wind turbines will not be in the way of communication signals from television and other signals sent via microwaves to ensure the wind farm will not cause any signal interruption.

**DOT Tall Tower Permit.** This is a permit required by the Department of Transportation due to the height of the towers (80 meters).

**3<sup>rd</sup> Party Wind Resource Analysis Including Energy Production Estimates.** This is a study that the project will commission a firm to generate based on the actual wind data collected at the project site. This study is used in estimating the anticipated output of the project for the purposes of securing financing.

**Wetland/Waterway Compliance Review/Determination.** This is a 3<sup>rd</sup> party engineer study to confirm that the project will not be constructed in or disturb any wetlands.

**US ACE Section 404 Clean Water Act Review.** This is a study performed by the US Army Corps of Engineers to ensure compliance with the clean water act.

**Army Corps of Engineers Permits/Approvals.** This is to cover any additional permits or approvals that would be required by the Army Corps of Engineers.

**Water Quality Standards Review.** This is a review of the overall project plan to confirm acceptable impacts of the project on water quality in the project area.

**Storm Water Discharge Permit.** This is a permit that will allow the project to discharge storm water.

**Phase I Environmental Study.** This is an initial study done by a third party consulting firm to determine that there is no existing environmental contamination at the project site prior to construction.

**Building Permits.** This is to cover the costs of a third party firm compiling and submitting building permits for the project.

**Driveway Permits.** This is to cover the costs of a third party firm compiling and submitting driveway permits for the project.

**DOT Delivery Route and Transportation Planning.** This is to cover the costs of a third party firm to coordinate transportation of the turbines and the towers from the manufacturing facility to the project site.

**Geotechnical Feasibility Study.** This is to fund a third party engineering firm study to ensure that the soil structure on which the turbines will be placed is adequate.

**NTIA Review.** This is a study by the National Telecommunications and Information Administration to confirm the project does not interfere with any telecommunication systems.

**Interconnection and Collector System Feasibility Study.** This is a extensive study done by a third party electrical engineering firm to ensure the costs and logistics to building a collector system (system which collects energy from each individual turbine and delivers it to a single collection point of interconnection to the grid) are feasible.

**PPA Procurement Assistance.** This is for the commissioning of a third party firm to procure a power purchase agreement from a utility for the offtake of power to be generated by the project.

**PPA Procurement Negotiation and Execution.** This is for the commissioning of a law firm to negotiate and execute, on behalf of Spirit Lake Nation, a power purchase agreement for the sale of power from the project.

**Interconnection Agreement Negotiation Assistance. This** is for the commissioning of a law firm to negotiate a final interconnection agreement with Midwest ISO for the guarantee of transmission for the project's power to the ultimate end customer.

**Land Lease Option Payments.** This is for any option payments that would be required to be provided to landowners for the potential use of their land for the implementation of the project.

**Baker Tilly Assistance as required per Phase I engagement.** This is for project management services rendered by Baker Tilly, LLP for the assistance in the execution of certain development steps and ensuring steps are executed in accordance with a Tribal Council approved plan.

**Additional Baker Tilly Assistance as required**. This is for ongoing project management and preparation of the project documents and related marketing materials for ultimate funding (\$250 million).

**Site control documentation.** This is for additional documentation required to evidence site control (real estate of the project) for presentation to Midwest ISO.

**Turbine supply agreement negotiation.** This is for legal work relating to execution of a turbine supply agreement with General Electric for the sale of wind turbines to the project.

**Balance of plant contract negotiation.** This is for legal work relating to execution of a balance of plant construction contract with a reputable general contractor for the construction of the project.

**Financing/Loan documentation review.** Legal work relating to review of all financing arrangements between the project and the debt and equity providers.

**Project level funding procurement.** Retainer to be paid to an investment bank to procure \$250 million of funding for the project.