CERTIFICATION AND FINANCING PROPOSAL

TRES MESAS WIND ENERGY PROJECT IN LLERA DE CANALES, TAMAULIPAS

Revised: May 18, 2014

CERTIFICATION AND FINANCING PROPOSAL

TRES MESAS WIND ENERGY PROJECT IN LLERA DE CANALES, TAMAULIPAS

INDEX

EXECUTIVE SUMMARY 2

1. ELIGIBILITY 3

2. CERTIFICATION CRITERIA

2.1 Technical Criteria

2.1.1. Project Description 3

2.1.2. Technical Feasibility 10

2.1.3. Land Acquisition and Right-of-Way Requirements 13

2.1.4. Management and Operations 13

2.2 Environmental Criteria

2.2.1. Compliance with Applicable Environmental Laws and Regulations 14

2.2.2. Environmental Effects / Impacts 17

2.3 Financial Criteria

3. PUBLIC ACCESS TO INFORMATION

3.1 Public Consultation 21

3.2 Outreach Activities 21

EXECUTIVE SUMMARY

TRES MESAS WIND ENERGY PROJECT IN LLERA DE CANALES, TAMAULIPAS

Project: The project consists of the design, construction and operation of 148.5-MW wind farm located in Llera de Canales, Tamaulipas (the "Project"). The energy generated will be purchased by Sigma Alimentos, S.A. de C.V., and other subsidiaries of Alfa S.A.B. de C.V., as well as by subsidiaries of Walmart de México S.A.B. de C.V. pursuant to two long-term power purchase agreements (PPAs) signed with the respective special purpose Project company.

Project Objective: The Project will increase installed capacity of renewable energy resources, which will reduce the demand on traditional fossil-fuel-based energy production and contribute to the displacement of greenhouse gas emissions and other pollutants from power generated by fossil fuels.

Expected Project Outcomes: The estimated environmental and human health outcomes resulting from the installation of 148.5 MW of new renewable energy generation capacity are:

a) Generation of approximately 510 GWh of electricity during the first year of operation,[1] and

b) An expected displacement of approximately 200,599 metric tons/year of carbon dioxide, 1 metric ton/year of sulfur dioxide, and 700 metric tons/year of nitrogen oxides.[2]

Sponsor: Oak Creek Energy Systems, Inc. (OCE), through its wholly owned Mexican subsidiary Frontera Renovable, S. de R.L. de C.V.

Borrowers: Eólica Tres Mesas, S. de R.L. de C.V. ("Tres Mesas I").
Eólica Tres Mesas, II S. de R.L. de C.V. ("Tres Mesas II").

Loan Amount: Up to US$55 million.

[1] Environmental impact is calculated based on P50 generation in the first year of operation provided by the Sponsor, based on the Energy Production Summary for the Tres Mesas Wind Project prepared by AWS Truepower, February 2013.

[2] CO_2, SO_2 and NOx calculations are based on emission displacement from wind energy generation equivalent to 510-GWh of energy produced by natural gas power generation, which is the predominant fuel source in Tamaulipas.

CERTIFICATION AND FINANCING PROPOSAL

TRES MESAS WIND ENERGY PROJECT IN LLERA DE CANALES, TAMAULIPAS

1. ELIGIBILITY

Project Type

The Project falls into the category of clean and efficient energy.

Project Location

The Project is located in the municipality of Llera de Canales, Tamaulipas, straddles the 300 km (186.4 miles) border line south of the U.S.-Mexico border.

Project Sponsor and Legal Authority

The **private-sector Sponsor** is Oak Creek Energy Systems, Inc. (OCE or the "Sponsor"), through its wholly-owned Mexican subsidiary Frontera Renovable, S. de R.L. de C.V, which will use two special-purpose companies named Eólica Tres Mesas, S. de R.L. de C.V. ("Tres Mesas I") and Eólica Tres Mesas II, S. de R.L. de C.V. ("Tres Mesas II") for the implementation of the Project. Tres Mesas I and Tres Mesas II are Mexican-based companies incorporated on July 24, 2012 and July 3, 2013, respectively. Their contact representative is Jason Garewal.

2. CERTIFICATION CRITERIA

2.1 TECHNICAL CRITERIA

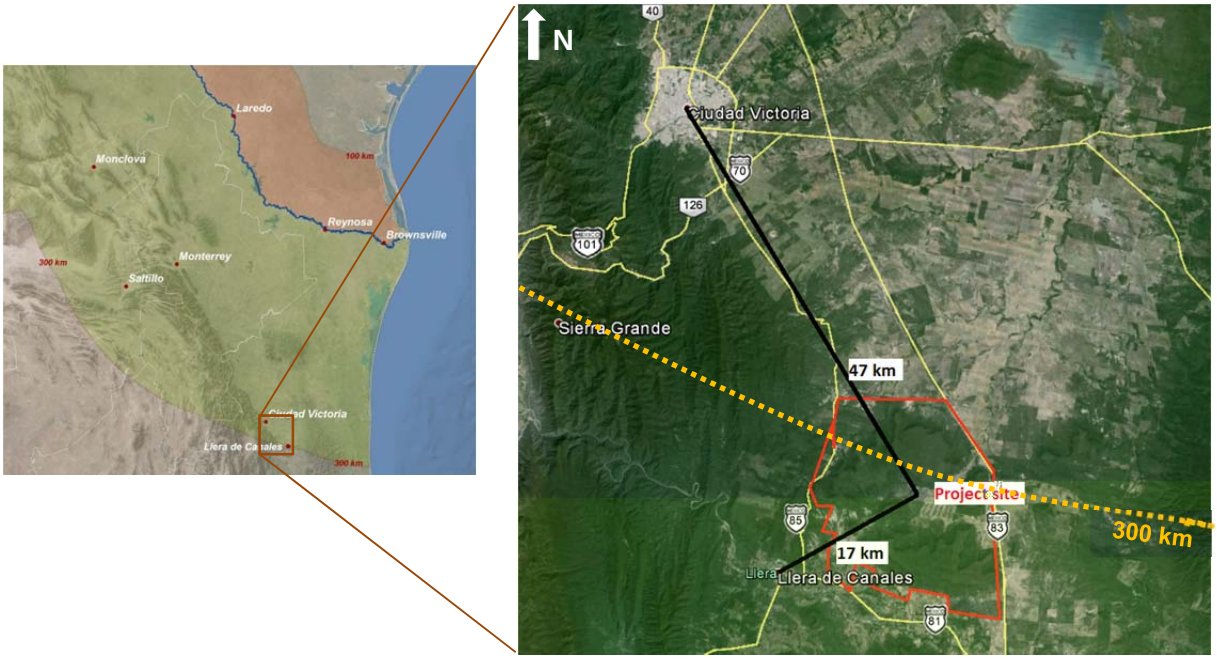
2.1.1. Project Description

Geographic Location

The Project site is located in the municipality of Llera de Canales, 29 miles south of Ciudad Victoria and 10.5 miles east of Llera de Canales, Tamaulipas, Mexico. The interconnection point of the Project is located within the adjacent municipality of Casas, Tamaulipas. The Project will be developed in an area of approximately 7,113 hectares (17,577 acres).
Figure 1 below shows the approximate geographic location of the Project. [3]

[3] The polygon represents the site for the construction of a more comprehensive wind energy facility to be implemented by the Project Sponsor. The proposed Project for certification, which represents a portion of the planned infrastructure, will be constructed on Mesa La Sandia which is located in the northern portion of the polygon.

Figure 1
PROJECT VICINITY MAP



General Community Profile

The Project is expected to benefit communities in the state of Tamaulipas, such as Reynosa, Nuevo Laredo and Ciudad Victoria that belong to the Northeast zone of the Mexican federal electricity comission, *Comisión Federal de Electricidad* (CFE).[4] Project benefits include the generation of electricity equivalent to the annual consumption of 70,951 households.[5] The construction of the Project will also benefit local communities by generating employment opportunities and additional taxes.

According to the Mexican 2010 census, the population of Tamaulipas was 3,268,554, which represents 2.9% of the total population of Mexico. Between the years 2000 and 2010, Tamaulipas experienced an average growth rate of 1.7% annually, similar to the national rate (1.8%).[6]

According to the most current economic activity information from INEGI, the state of Tamaulipas contributed 3.02% to the gross domestic product (GDP) of Mexico in 2011. The main

[4] Based on 2010 information from the Mexican national statistical institute, INEGI, BECC estimates more than 138,000 households are located within the 300-km border region of the state of Tamaulipas.
[5] Estimation based on 1,997.442 kWh of electricity consumption per capita in 2012 from Mexico's Energy Information System (http://sie.energia.gob.mx/) and 3.6 persons per household in the state of Tamaulipas as indicated by INEGI (http://www3.inegi.org.mx/sistemas/mexicocifras/default.aspx?e=28).
[6] Source: INEGI, 2010 general population and housing census (http://www3.inegi.org.mx/).

activities contributing to the state GDP are: manufacturing (16.2%), commerce (15.1%), real estate services (13.8%), transportation (9.2%), construction activities (9.1%) and oil mining (8.8%). The remaining 27.8% of the GDP is scattered among other productive sectors, including agriculture, financial services, educational services, textile fabrication, paper industry, food industry and professional services.

Local Energy Profile

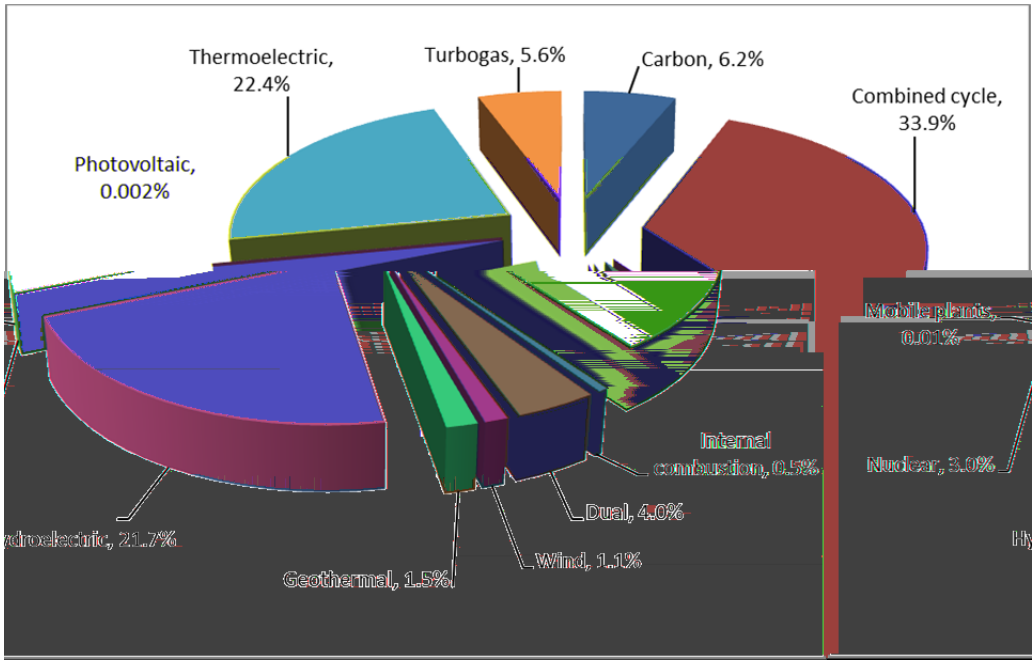
CFE is a power company created and owned by the Mexican government. It generates and distributes electric power to more than 35 million accounts or nearly 100 million people. To manage its power supply, CFE operates an electric grid with more than 766,500 km of transmission and distribution lines.[7] During the last 12 years power generation has increased 3.2% annually, with power production totaling 278,086 gigawatt-hours (GWh) in 2012.[8]

CFE generates electric power using various technologies and energy sources. To better support opportunities for increasing and diversifying the energy portfolio, in 1992, the Mexican Power Utility Law was amended to allow for the participation of private capital in energy generation activities under the following schemes: a) cogeneration or small power production, b) self-supply, c) independent power production, d) exports, and e) imports for self-consumption. Additionally, in 1995, the Energy Regulatory Commission (CRE) was created to regulate activities related to the participation of private investment in the power and natural gas (NG) sector. CRE is responsible for issuing permits to private entities for power generation and NG transportation.

According to the Ministry of Energy's (SENER) Electric Sector Outlook for 2013-2027 (PSE), installed capacity for power service in 2012 was approximately 53,114 MW, which represents an increase of 1.14% compared to 2011 (52,512 MW). Mexico's energy portfolio includes thermoelectric, geothermal, hydroelectric, coal-fired, solar photovoltaic, wind and nuclear power plants. The PSE contemplates an Expansion and Decommissioning Program, which would entail adding 46,915 MW of capacity to the existing system over the next 15 years to achieve a gross capacity of 88,200 MW by 2027. Figure 2 shows the technologies used for electricity generation in Mexico.

[7] Source: CFE's Capital Improvement Program for the Energy Sector for 2012-2026 (POISE).
[8] Source: SENER, Electric Sector Outlook for 2013-2027.

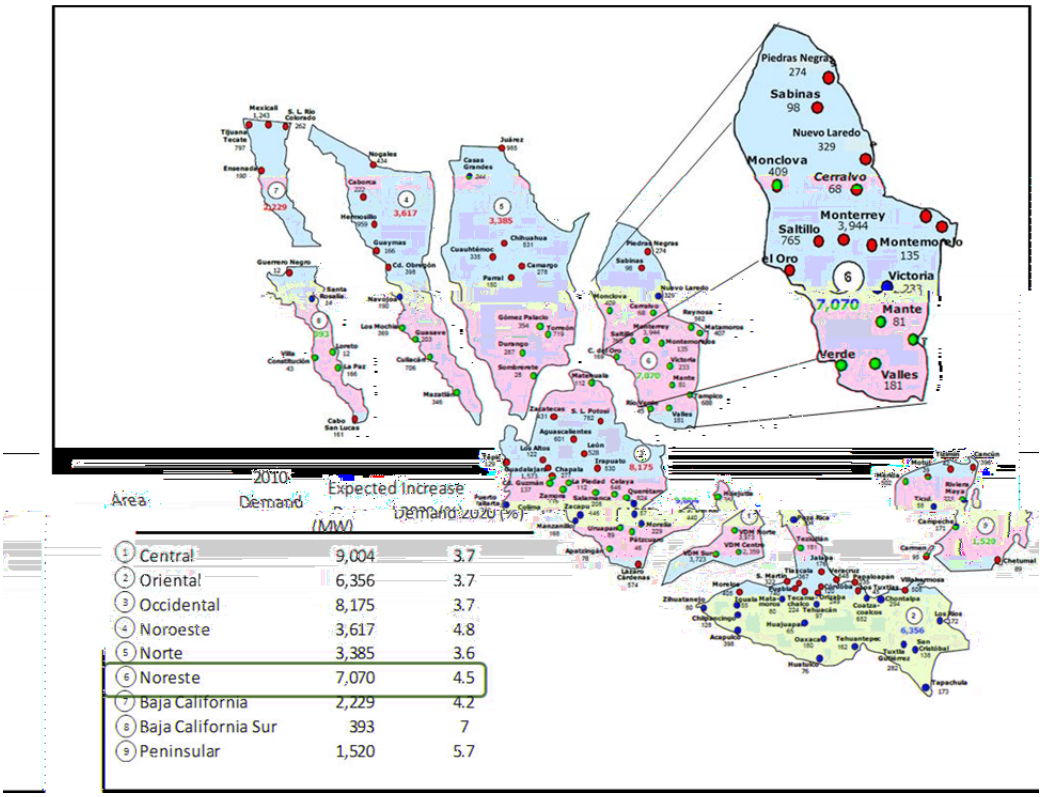
Figure 2
CFE PORTFOLIO OF ENERGY TECHNOLOGIES, 2012



Source: Electric Sector Outlook for 2013-2027

The electrical grid is defined by nine zones, seven of which are interconnected and form the National Interconnected System (SIN). The remaining two zones are independent supply networks serving the areas of Baja California and Baja California Sur. The Project will be located in the CFE northeast zone (NEZ), which includes the states of Tamaulipas, Nuevo Leon, a large part of Coahuila and some municipalities from San Luis Potosí, as illustrated in area 6 in the following figure.

Figure 3
MEXICO ELECTRIC SYSTEM ZONES



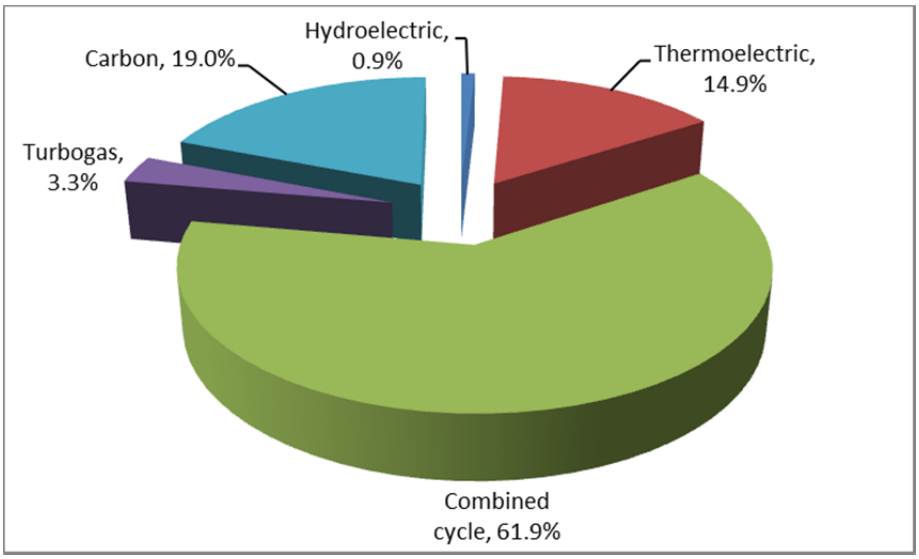
Area	2010 Demand (MW)	Expected Increase annual Demand 2026 (%)
1 Central	9,004	3.7
2 Oriental	6,356	3.7
3 Occidental	8,175	3.7
4 Noroeste	3,617	4.8
5 Norte	3,385	3.6
6 Noreste	7,070	4.5
7 Baja California	2,229	4.2
8 Baja California Sur	393	7
9 Peninsular	1,520	5.7

Source: CFE's Investment and Works Program for the Energy Sector 2012-2026

According to the Capital Improvement Program for the Energy Sector for 2012-2026 (POISE), the generation capacity of the northeast zone was 7,587 MW in 2011 and during the previous five years energy demand in the zone experienced an average annual growth rate of 4.9%. The POISE also indicates that the energy produced in the NEZ is mainly consumed in the Monterrey metropolitan area, which recorded a maximum demand of 3,813 MW in August 2011. The Reynosa area has also experienced a significant growth in demand. To better manage the energy needs of the zone as a whole and provide more flexibility, the power grids from the Nuevo Laredo, Matamoros and Monterrey areas are all interconnected.

Figure 4 shows the distribution of the energy technologies in the northeast zone.

Figure 4
ENERGY PORTFOLIO IN THE NORTHEAST ZONE, 2012



Source: Electric Sector Outlook 2013-2027

To promote the use of renewable energy, the Mexican federal government enacted two laws in the past six years. In 2008, Mexico enacted the Law for Renewable Energy Use and Energy Transition Financing (LAERFTE). In 2012, the General Law of Climate Change was enacted. Both laws specify, among other provisions, that SENER, in coordination with CFE and CRE, must be responsible for increasing the use of clean technologies in power generation to at least 35% by 2024.

CFE has undertaken efforts to increase the use of non-fossil fuel technologies in power generation. In 1994 CFE began operating its first wind farm with a capacity of 1.6 MW in La Venta, Oaxaca, and in January 2007, the La Venta II wind farm with a capacity of 83 MW started operations in the same area. During the period of 2012-2027, CFE is considering increasing the use of renewable energy by 2,892 MW, including wind, solar and hydroelectric resources. CRE has received letters of intent to develop 1,212 MW of wind energy projects in Tamaulipas during the open project application process in that state.[9] The private sector supports renewable energy development through wind energy projects, such as Ventika (252 MW) in Nuevo León, Energía Sierra Juárez (155.1 MW) in Baja California and El Porvenir (54 MW) in Tamaulipas.

At the state level, the Tamaulipas State 2011-2016 Development Plan contains 16 objectives for supporting areas of strategic development in Tamaulipas. The environmental objectives include the development of clean energy alternatives, such as renewable energy projects for residential and industrial consumption.

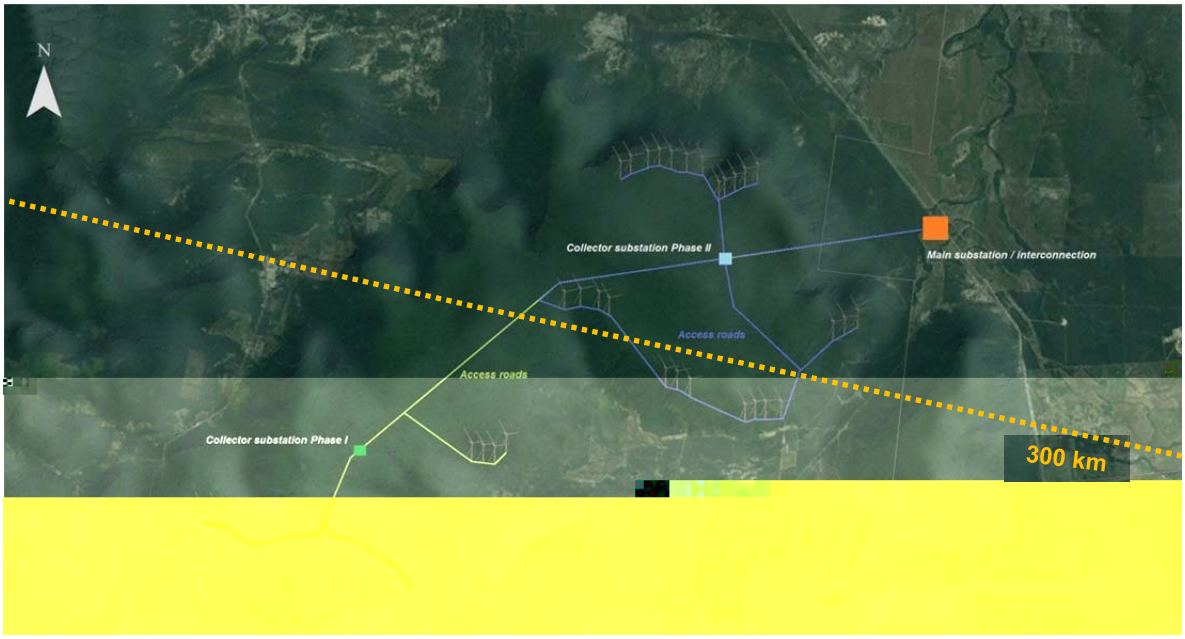
[9] Source: CFE's Capital Improvement Program Strategies for the Energy Sector for 2012-2026.

Finally, at the local level, the Llera de Canales Municipal Development Plan for 2011-2013, identifies potential investments and the development of projects in the municipality. The Plan considers a sustainable environmental management plan that includes energy savings.

Project Scope and Design

The scope of the Project is to design, build and operate a wind farm with a capacity of 148.5 MW.[10] The Project will be developed on Mesa La Sandía, occupying an area of approximately 7,113 hectares (17,577 acres). Figure 5 shows the Project site.

Figure 5
PROJECT SITE



The Project components include the installation of wind turbines and collector substations. The collector substations will step up the energy and will be connected through overhead, parallel transmission lines to a newly built, main substation, which will send the energy to the existing CFE grid.

In addition, eight temporary meteorological towers will be installed within the site to enhance wind measurements. Installation of these towers also includes rehabilitation of roads. Section 2.1.2 provides additional technical information about the Project.

[10] The Project is part of a larger project to be developed on an area known as "Tres Mesas" comprised of Mesa La Sandía, Mesa Las Chinas and Mesa de la Paz.

Construction of the Project is scheduled to start in June 2014, and the Commercial Operation Date (COD) will be no later than October 2015.[11] Table 1 presents the status of key tasks for the implementation of the Project.

Table 1
PROJECT MILESTONES

Key Milestones	Status
Land lease agreements and right of ways	Completed (October 2009)
Authorization to install wind turbines issued by the Ministry of Communications and Transportation	Completed (January 2012)
CRE authorization for energy generation	Completed (February 2014)
CFE Interconnection Agreements	In progress
SEMARNAT environmental authorization (MIA resolution)	Completed (January 2014)
State of Tamaulipas MIA resolution for installation of meteorological towers	Completed (May 2013)
Forested Land Use Change authorization issued by SEMARNAT for meteorological towers and roads	Completed (May 2013)
Forested Land Use Change authorization issued by SEMARNAT for construction of the Project	In progress
Land use change authorization issued by the Municipality of Casas for the interconnection point/substation	In progress
Construction permit for the meteorological towers and road rehabilitation issued by the Municipality of Llera de Canales	Completed (April 2013)
Engineering, Procurement, and Construction (EPC) Agreement	In progress
Power Purchase Agreements	Completed (May 2013)
Independent Engineering Final Report	In progress
Commercial Operation Date	October 2015

NADB's procurement policies require that private-sector borrowers use appropriate procurement methods to ensure a sound selection of goods, works and services at fair market prices and that their capital investments are made in a cost-effective manner. As part of its due-diligence process, NADB will review compliance with this policy.

2.1.2. Technical Feasibility

Selected Technology

Current technologies allow for more efficient and reliable power generation, as well as greater production at average wind speeds, in part due to an increase in blade size and improved blade designs. The Sponsor evaluated ten different of wind turbine models from various suppliers and selected the equipment best suited to the characteristics of the Project sites in order to obtain the best performance (long-term energy output) based on the wind resources. The evaluation

[11] Information provided by the Sponsor.

considered turbine reliability, productivity, competitive pricing, warranty conditions, availability of long-term service and manufacturer's experience.[12]

The main components of the Project include:

- *Wind Turbines*. Installation of 45 wind turbines, each with 3.3 MW of nominal power. Wind turbine transformers will step up the voltage of generated power to 34.5 kV for transmission through an insulated underground cable. The towers will have a hub height 91.5 meters and a steel design.

- *Electrical substations and transmission line*. Two substations will be constructed to collect the 34.5 kV energy produced through underground transmission lines. The collecting substations will step up the energy to 115 kV and will be connected through overhead transmission lines to a newly built main substation. The energy will then be scaled to 400 kV and will be delivered to the CFE grid.

- *Monitoring and Control System*. Through the SCADA system the operation of each turbine, as well as the Project as a whole, can be controlled and monitored from a central computer or a remote PC. In case of problems, the SCADA system will alert the operations staff. The control system will always be in operation to ensure that the machines are running in an efficient and safe manner. Additionally, the system will be able to monitor and record the atmospheric measurements of multiple meteorological towers.

- *Roads*. The Project has an existing road network on the east and west sides. Approximately 58 km (36 miles) of roads will be rehabilitated to allow the access of heavy machinery and trucks to the site. Approximately 18 km (11 miles) of the network will be used as main access roads. Approximately 36 km (22.5 miles) will be rehabilitated as secondary roadways. The top layer on the roads will depend on their use for construction and operation activities. Additionally, the installation of the eight temporary towers includes the rehabilitation of 25.15 km (15.7 miles) of roadway. In order to avoid dust emissions, water will be sprayed during site preparation, construction, operation and decommissioning activities.

- *Operation and Maintenance Facilities*. One O&M facility will be built. It will include a permanent administrative, maintenance and storage building for equipment during construction and operation.

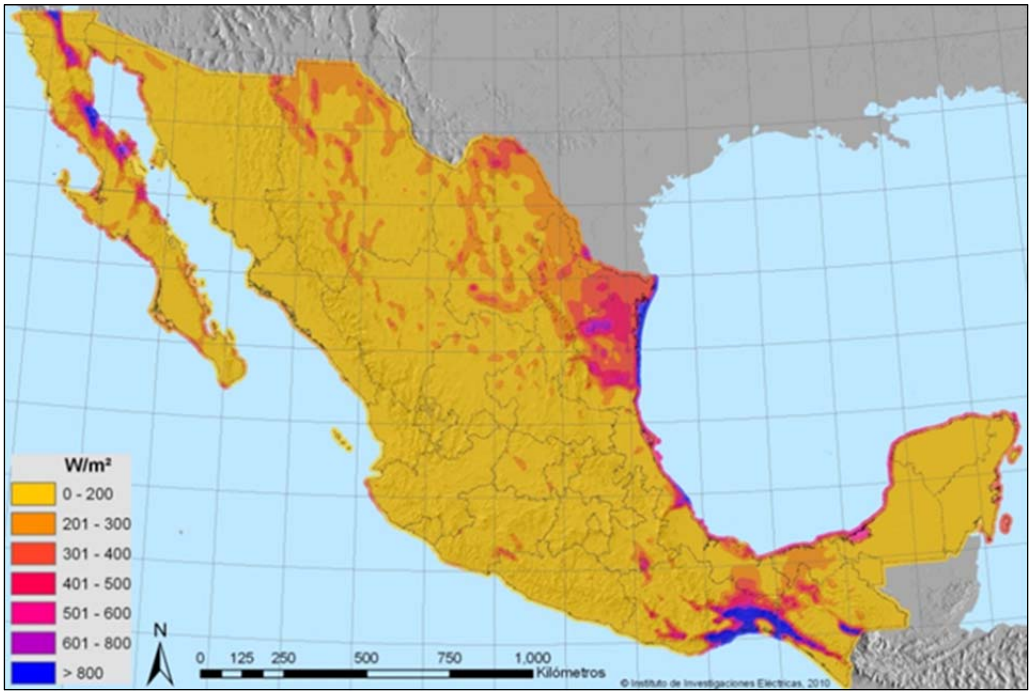
- *Meteorological towers*. Four permanent towers are already installed in the site for wind monitoring and evaluation of potential energy generation. A total of eight additional temporary towers will be installed, which are expected to remain in operation during the Project's first year of operation. The data collected will be correlated with the information obtained in the four permanent towers.

[12] Source: Project Sponsor selection process document.

Wind Resource Assessment

The Project is located in the state of Tamaulipas, where mid-level wind power density has been reported. According to the Mexican Power Research Institute (IIE), wind resources in the state range from 301 to 500 W/m^2 (see Figure 6). [13]

Figure 6
NATIONAL WIND RESOURCE POTENTIAL



Source: Mexican Power Research Institute.

In order to assess the wind resources available in the Project area, a single monitoring mast designated *Norte* was installed in December 2007. Three additional masts, designated *Sur, Sandia,* and *TM01* were installed in January 2008, August 2009, and March 2013, respectively. All four masts are in operation and report average wind speed, direction, and temperature every 10 minutes. Available data from the meteorological towers were compiled, validated, and incorporated into the wind resource analysis. Based on the preliminary results, it is estimated that the Project will generate an average of 510 GWh of electricity in the first year of operation.[14] The results are being vetted for accuracy and related risks by an independent engineer.

[13] Source: *Instituto de Investigaciones Eléctrica*s (IIE), www.iie.org.mx/.
[14] Source: AWS Truepower, Energy Production Summary for the Tres Mesas Wind Project, February 2013.

2.1.3 Land Acquisition and Right-of-way Requirements

The Project is located in a rural area where livestock farming is the main activity. The Sponsor has secured the land and rights of way for the Project. Documentation related to rights of way, land purchases, and lease agreements with private entities and "*ejidos*" has been provided for the Project.

The Sponsor also took into consideration the installation of eight temporary meteorological towers. Authorization of the corresponding Environmental Impact Assessment (MIA) is described in section 2.2.1. Forested Land Use Change Authorization No. SGPA/03-0977/13 for the installation of these components was issued by SEMARNAT in May 2013. The Project will also require a SEMARNAT Forested Land Use Change authorization for construction, which is expected by the end of June 2014.

Since the location of the main substation and point of interconnection falls under the jurisdiction of the Municipality of Casas, the Project will also require a municipal permit for land use and construction, which is expected to be issued in June 2014.

2.1.4. Management and Operations

Established in 1982 and based in Escondido, California, OCE is a wind energy developer with proven expertise in the successful development, construction, operation and management of utility-scale renewable energy projects in the U.S., Canada, Europe, and Japan. OCE has developed in excess of 1,500 MW in North America and currently has 800 MW under development. OCE teams with local partners for wind power project development. This approach combines its industry experience with local knowledge and contacts, creating mutually beneficial relationships with landowners, businesses and community leaders to create enhanced value from projects.

The proposed Project will be designed to operate with minimal human intervention. Operation and maintenance tasks will be performed to optimize the operating times of the turbines, reduce repair costs, and extend the life of the equipment. The Sponsor executed two Service and Maintenance Agreements (SMAs) with the turbine manufacturer in December 2013. The SMAs specify the tasks to be performed for all turbines and balance of plant operations and maintenance during the term of the agreements. The scope of the SMAs includes services such as industry standard O&M management tasks, reporting, remote monitoring and resets, and maintaining logs and records.

2.2 ENVIRONMENTAL CRITERIA

2.2.1. Compliance with Applicable Environmental Laws and Regulations

Applicable Laws and Regulations

Below is a list of the general laws and regulations applicable to the Project, as provided in the MIA presented by the Sponsor in June 2013.[15]

- *General Law of Ecological Balance and Environmental Protection (LGEEPA),* which establishes the environmental regulatory framework, expands the strategic vision, and conveys specific powers and duties to the states and municipalities, so that the environmental problems of each can be addressed directly.
- *General Law for Waste Prevention and Comprehensive Waste Management (LGPGIRS),* which seeks to identify the criteria that should be considered by various levels of government in the generation and comprehensive management of solid waste, in order to prevent and control environmental pollution and ensure the protection of human health.
- *General Wildlife Law*, which establishes the concurrence of the federal, state and local governments regarding the conservation and sustainable use of wildlife and their habitats in Mexico.
- *General Law for Sustainable Forest Development (LGDFS),* which regulates and promotes the conservation, protection, restoration, production, zoning, cultivation, management and use of the country's forest ecosystems and their resources.
- *National Waters Law (LAN),* which regulates the exploitation of water and its use or enjoyment, distribution and control, as well as the preservation of its quantity and quality to achieve integrated and sustainable development.
- *NOM-001-SEMARNAT-1996,* which establishes the maximum levels of pollutants in wastewater discharged into national waters and resources.
- *NOM-041-SEMARNAT-2006,* which establishes the maximum levels of pollutants emitted by vehicles using gasoline as fuel.
- *NOM-045-SEMARNAT-2006,* which establishes the maximum levels of opacity detected in vehicles using diesel as fuel.
- *NOM-052-SEMARNAT-2005,* which establishes the characteristics, procedures, identification and classification of hazardous solid waste.
- *NOM-161-SEMARNAT-2011,* which establishes the criteria for classifying solid waste requiring special handling and determines the procedures for developing management plans.

[15] Source: *Manifestación de Impacto Ambiental, Modalidad Particular*. Tres Mesas Wind Farm. June 2013.

- *NOM-080-SEMARNAT-1994*, which establishes the maximum levels of noise emissions from motor vehicles, motorcycles, and 3-wheel motor vehicles, as well as noise measuring methods.
- *NOM-081-SEMARNAT-1994*, which establishes the maximum levels of noise from stationary sources and noise measuring methods.
- *NOM-059-SEMARNAT-2010,* which identifies endangered species or clusters of wildlife in Mexico by preparing the corresponding lists and establishing the criteria for inclusion, exclusion or change in risk status for different species, using a method for assessing the risk of extinction.

Environmental Studies and Compliance Activities

The Project is subject to federal and state environmental clearance authorizations in Mexico. For the construction of the Project, the Sponsor developed a MIA as required by the Ministry of Environment and Natural Resources (SEMARNAT). The MIA identifies, describes and evaluates the potential environmental effects associated with the proposed action and alternatives. The evaluated elements include the soil, geological and hydrological resources, flora and fauna, as well as visual and sociocultural aspects and the migratory routes of birds, bats and monarch butterflies.

The geographical location of the Project presents low climate affinity levels for butterflies; therefore, their presence is expected to be minimal. The Sponsor has conducted a pre-construction Bird and Bat Monitoring Program during spring, summer and autumn 2013. The purpose of the Program was to identify resident and migratory avian species in order to determine potential impacts to these species.

In general, the richness and abundance of species registered at counting points were higher for resident birds of terrestrial habits, finding low percentages of birds that fly above the canopy. According to the Program, during spring and summer 2013, most of the migratory species were observed outside the boundaries of the Project site and/or heights above 125 meters (410 feet). During autumn 2013, the Program reported an increased number of migratory species observed at heights above 120 meters (394 feet). Three predatory bird species were observed flying over the Mesas and showed collision risk.

The dedicated equipment for bat monitoring registered no activity during summer and autumn, it is therefore inferred that presence of bats in the Project site is low. However, two additional detectors will be used to obtain more information on bat activity in the area. Results will be included in the winter season report which is under development and expected to be completed by May 2014. Based on the findings of the MIA and after a thorough analysis of potential impacts, the MIA concluded that the execution of the Project would not significantly affect the environment. In January 2014, SEMARNAT issued the MIA Resolution, authorizing the development of the Project.

Prior to the construction of the Project, the Sponsor will install eight additional temporary meteorological towers and begin the rehabilitation of roads. A MIA was also prepared for this activity and evaluated by the Ministry of Urban Development and Environment of the State of

Tamaulipas (SEDUMA). After conducting an analysis of potential impacts, the MIA concluded that the installation of these components would not significantly affect the environment. Moreover, mitigation measures were considered in the MIA and will be included in the EMP. In May 2013, SEDUMA issued the MIA Resolution, authorizing the installation of the additional meteorological towers and the rehabilitation of roads.

A pre-construction noise study was conducted in order to establish a baseline noise level. Operation of the proposed Project is not expected to exceed the noise level limits established in Official Mexican Standard NOM-081-SEMARNAT-1994: 50 decibels nighttime and 55 decibels daytime in any exterior residential areas. Noise levels generated by the wind turbines will also be analyzed during the operation phase as required in the MIA Resolution.

Additionally, as a requirement to engage an additional funding source from the Overseas Private Investment Corporation (OPIC),[16] the Sponsor conducted an Environmental and Social Impact Assessment (ESIA). The ESIA considered the entire Project site, the maximum number of wind turbines, the widths of roads and the transmission line routes. The Assessment concluded that the installation of the Project will not cause relevant negative environmental impacts on the environmental system.

Pending Environmental Tasks and Authorizations

The following environmental authorizations are pending:

- Construction: Land use change authorization to be issued by SEMARNAT.
- Substation/interconnection: Land use change authorization to be issued by the Municipality of Casas.

Compliance Documentation

The Sponsor has obtained the following federal and state environmental clearances required for the Project:

- MIA Resolution No. SGPARN/03-049/14 issued by SEMARNAT.
- MIA Resolution No. SEDUMA/SSMA/DGPA/MIA/037/2013 issued by the State of Tamaulipas for the meteorological towers and roads.
- Forested Land Use Change authorization No. SGPA/03-0977/13 issued by SEMARNAT for the meteorological towers and roads.

[16] OPIC is committed to supporting projects that advance a sustainable, lower-carbon economy, greater resource efficiency and a cleaner and more secure energy supply. In 2013, OPIC committed a record $1.2 billion to a range of new renewable energy projects spanning solar and wind power, geothermal, biomass and hydropower.

2.2.2. Environmental Effects / Impacts

There is a need for affordable and environmentally beneficial alternatives to conventional hydrocarbon-based energy sources. Renewable energy projects create an opportunity to generate electricity without the atmospheric emissions generated by fossil-fuel-based plants. Wind is a renewable energy source, which means that it can be used continuously without depleting natural resources. Wind is a clean form of renewable energy and is currently used in many developed and developing nations to

- Comprehensive Flora and Fauna Management Program
- Comprehensive Waste Management Program
- Environmental Supervision Program
- Environmental Outreach Program

Pursuant to the applicable provisions of the LGDFS and in compliance with the provisions of the LGEEPA regarding environmental impact assessments, the MIA states the following activities must be carried out during site preparation, construction and operation of the Project:

- *Flora*
  - Native species will be removed only from those areas where construction activities will take place, such as foundations, transmission lines, roads, facilities and substations.
  - Species identified in NOM-059-SEMARNAT-2010 will be relocated to nearby areas.
  - For soil restoration activities, native species are preferred, especially those intended to be relocated.
  - It is prohibited to collect, trade or harm flora, especially if they are protected by NOM-059-SEMARNAT-2010.
  - During land striping, no vegetation will be burned and the use of agrochemicals will be avoided as much as possible.

- *Fauna*
  - In accordance with the Wildlife Rescue Program included in the Flora and Fauna Management Program, low-mobility species will be relocated to sites with environmental characteristics similar to their ecological requirements. This program must be implemented during site preparation.
  - Perform land clearing activities in a planned and gradual manner to allow the native wildlife to move to areas that will not be cleared for the implementation of Project tasks.
  - Wildlife hunting, capture and trafficking will be officially banned.
  - Visual and acoustic deterrents will be installed to prevent bird and bat collisions.
  - A Bird and Bat Monitoring Program will be continued during the construction and operation phases.
  - Anticipates the possibility of momentary stoppages, when the presence of migrating birds is massive.

- *Solid Waste*
  - Waste must be managed in accordance with the provisions of the Solid Waste Management Program.
  - In the event of any hydrocarbon (oils, greases and fuels) spill, the contaminated soil will be removed and will be handled as hazardous waste.

- *Air Quality*
  - Movement of vehicles will be restricted to working areas only. Trucks carrying material that can be dispersed into the atmosphere must use tarps. In order to avoid dust emissions, water will be sprayed as necessary during site preparation, construction, operation and decommissioning activities.
  - Water and soil will be conserved by installing previously removed vegetation covers to mitigate particle emissions.
  - Land stripping will be gradual. Based on the work schedule and in order to prevent particle emissions, construction activities will start as soon as an area is cleared.
  - Contractors will be asked to follow a maintenance program for machinery and equipment to ensure that they are kept in good working order.

- *Soil*
  - Control measures will be implemented to prevent fuel, oil, and grease spills caused by the use of machinery during the construction phase. In case of accidental spills, contaminated soils will be removed and handled as hazardous waste.
  - Fuel containers must be placed on impervious surfaces to prevent soil contamination from leaks or spills.
  - The layer of topsoil removed shall be used in filling and leveling.

- *Water*: Necessary groundwork will be developed to capture and divert rainwater into retention ponds.

According to the MIA Resolution, SEMARNAT considers the mitigation activities included in the MIA and its Resolution to be environmentally sound and feasible for minimizing potential adverse effects due to the development of the Project. Moreover, the Project will not be developed within a fragile ecosystem, protected area, biosphere reserve or area designated as having some cultural, scenic or archaeological value.

Natural Resource Conservation

The Project will support natural resource conservation by reducing the demand on fossil fuels for energy production and contributing to improvements in air quality. The Project is anticipated to produce approximately 510 GWh, of zero-carbon electricity in the first year of operation, equivalent to the annual energy consumption of 28,244 and 70,951 households. In addition, clean technologies such as wind energy require no water for electricity production, whereas fossil-fuel-fired generation is typically water intensive.

No Action Alternative

The "no action" alternative to the development of renewable energy sources would result in greater demand for conventional fossil-fuel-based energy production, further depleting natural resources for the purpose of meeting an ever-growing demand for energy, as well as a lost opportunity to generate emission-free energy, such as that derived from wind sources. Additionally, the Project will help meet the goals established by LAERFTE and comply with emissions regulations, while satisfying increased demand for electricity. Should the Project not be implemented, the mix of renewables in Mexico will be delayed.

Existing Conditions and Project Impact – Health

Epidemiological research has shown that both chronic and acute exposure to harmful emissions associated with fossil fuel-based energy production can lead to serious respiratory problems. It is estimated that, at the very least, prolonged exposure to excessive levels of pollutants can deteriorate the respiratory capacity of human beings and greatly contribute to the increased incidence of cardiopulmonary diseases, such as asthma, heart ailments, and lung cancer.

By using clean renewable resources instead of conventional fossil fuel sources in power generation, the Project will positively impact the region by reducing pollutants and thus help to contain the severity of respiratory problems and other diseases aggravated or caused by air pollution. In addition, the reduction of GHG emissions is expected to mitigate climate effects that create more vulnerable conditions for human health.

Transboundary Effects

No negative transboundary impacts are anticipated as a result of the development of the wind energy project; on the contrary, a beneficial effect is anticipated on air quality due to the decreased demand on fossil-fuel-fired electrical plants in the region. Furthermore, the Project will aid in addressing the larger environmental concerns related to greenhouse gases and global warming targeted by international agendas.

Other Local Benefits

During construction, the Project is expected to generate more than 230 jobs, while 11 permanent jobs are expected to be created during operation.

The Project will promote the social and economic development of the municipality of Llera de Canales in the state of Tamaulipas. Employment of construction personnel will provide a temporary beneficial impact on local businesses and the regional economy through increased expenditure of wages for goods and services. Personnel for construction would be drawn from local populations to the extent feasible.

2.3. FINANCIAL CRITERIA

The Project Sponsor has requested a loan from the North American Development Bank (NADB) to complete the financing of the Project. The proposed payment mechanism is consistent with the project structure normally seen in the renewable energy industry. The source of payment will be the revenue generated by the Project in accordance with the pricing established under the PPAs that have been signed by the Project Companies. NADB loan will have no recourse beyond the Project Companies, Eólica Tres Mesas and Eólica Tres Mesas II.

The Project expected revenue from the sale of electricity is estimated to be sufficient to: a) cover scheduled O&M expenses, b) fund any debt service reserve, c) pay the debt service on the senior loans, and d) comply with debt service coverage requirements.

In addition, NADB's analysis verified that Eólica Tres Mesas and Eólica Tres Mesas II have the legal authority to contract financing and pledge their revenue for the payment of financial obligations. Eólica Tres Mesas and Eólica Tres Mesas II also have the legal and financial capacity to operate and maintain the Project based on the experience provided by their development team. Eólica Tres Mesas and Eólica Tres Mesas II will contract the Project O&M services with a firm with ample experience and expertise in the industry. NADB will verify that the projected O&M costs and contract warranties are in accordance with industry standards.

Considering the Project's characteristics and based on the financial and risk analyses performed, the proposed Project is considered to be financially feasible and presents an acceptable level of risk. Therefore, NADB proposes providing a market-rate loan for up to US$55 million for the construction of the project described herein.

3. PUBLIC ACCESS TO INFORMATION

3.1. PUBLIC CONSULTATION

BECC released the Draft Project Certification and Financing Proposal for a 30-day public comment period beginning April 17, 2014. The following documentation is available upon request:

- Federal MIA, Particular Modality.
- MIA Resolution No. SGPARN/03-049/14 issued by SEMARNAT.
- State MIA, General Modality for the meteorological towers and roads.
- MIA Resolution No. SEDUMA/SSMA/DGPA/MIA/037/2013 issued by the State of Tamaulipas, for the meteorological towers and roads.
- Forested Land Use Change Authorization No. SGPA/03-0977/13 issued by SEMARNAT for meteorological towers and roads.
- SCT Authorization No. 4.1.202.3920/VUS issued by the Ministry of Communications and Transport (SCT) for the wind turbines.

The 30-day public consultation period ended on May 17, 2013, with no comments received.

3.2. OUTREACH ACTIVITIES

As part of the outreach activities for the Project, the Sponsor conducted several meetings with state and municipal government representatives, land owners and "*ejido*" authorities. The main activities with government officials were related to presentation of the Project. On February 14, 2013, the Sponsor presented the Project to the Tamaulipas General Secretary and discussed the acquisition of Frontera Renovable by OCE from the previous developer. The Secretary was very interested in the Project and committed to provide support to keep the investment in the state.

On the same day, the Sponsor met with the mayors of Llera de Canales and Ciudad Victoria. The mayors were also supportive and recognized the benefits of the Project to the community. On March 15, 2013, the Municipality of Llera de Canales sent a letter to the Sponsor expressing its interest in supporting this Project, since it is aligned with the objectives of the Llera de Canales Municipal Development Plan for 2011-2013 and the Llera de Canales Municipal Plan for Zoning and Urban Development.

According to documents provided to BECC, further meetings held with government officials and "*ejido*" representatives were related to coordinating activities and discussing details of the Project:

- On April 18, 2013, the Sponsor met with SEMARNAT officials to discuss the Project and aspects to be considered in the MIA.
- On May 20, 2013, the Sponsor signed a right-of-way agreement with Ejido San Francisco to conduct construction activities.
- On May 23, 2013, the Sponsor met with the SEMARNAT Delegate in Tamaulipas to present the Project development activities and necessary permits.
- On July 14-17, 2013, the Sponsor held meetings with the authorities of various ejidos (Rancho Nuevo, Angostura, San Francisco, Pedro J. Méndez and Compuertas) to explain an ongoing social-environmental audit.
- On September 20-21, 2013, meetings were held with Ejido Rancho Nuevo, Ejido Angostura and Ejido San Francisco to discuss how the communities can work together for the benefit of all the communities.
- On September 24, 2013, the Sponsor met with Ejido Rancho Nuevo to discuss previous commitments to work together. The Sponsor donated half of the barbed wire to divide the "*ejido"* property and a private parcel.
- On October 25-26, 2013, meetings were held with Ejido Pedro J. Mendez, Ejido Emiliano Zapata and Ejido Las Compuertas to discuss how the communities can work together for the benefit of all the communities.
- On December 11, 2013, a meeting was held with Under Secretary of State for Tamaulipas to brief him about the progress of the activities related to the Project.
- On December 12, 2013, a meeting was held with the new mayor of Llera de Canales to explain the ongoing activities and potential benefits to the community. The mayor committed to support the Project.

To support access to Project information, non-technical summaries were made available to the public and after each community presentation, attendees were invited to answer a written survey. If an attendee could not read or write, the survey was presented orally. More than 260 persons answered the survey. The Sponsor describes that overall, the survey revealed a favorable response to the Project, especially related to potential job creation and revenues to local businesses during construction.

As described in the Environmental Studies and Compliance Activities section, the Project is seeking funding participation from OPIC and, in addition to the public comment period required for Project Certification and Financing, is also subject to a public consultation period related to the environmental aspects of the Project on the OPIC website. The ESIA was published in April 01, 2014 for a 60-day public comments period. [18] This funding source-specific comment period must be complete prior to a formal decision to participate in the Project can be made by OPIC.

Finally, BECC conducted a media search to identify potential public opinion about the Project. References to the Project were found on the Sponsor's website and several Internet sites, including the *Radio W1420*, *Retail in Detail, Tamaulipas government website* and *AM news.*[19] Some of the information highlights the interest of Walmex in entering the market of renewable energy in Tamaulipas with the approval and support of the state government. Other news articles also highlight the interest of Sigma Alimentos in producing energy through clean technologies such as wind farms. No opposition to the Project was detected in the media search.

Examples of these articles can be found at the following links:

- *Online radio W1420* (June 4, 2013) – "*Anuncia Walmart inversión millonaria para Tamaulipas" (Walmart announces a multi-million dollar investment in Tamaulipas)* http://www.w1420.com/2013/06/04/anuncia-walmart-inversion-millonaria-para-tamaulipas/
- *Tamaulipas online news* (June 4, 2013) – "*Anuncia Walmart más inversiones para Tamaulipas*" (Walmart announces more investments in Tamaulipas) http://www.tamaulipas.com.mx/portal/?p=3942
- *Retail in detail* (June 4, 2013)– "*Walmart se pone verde en Tamaulipas, anuncia proyecto sustentable*" (Walmart goes green in Tamaulipas; announces sustainable project) http://www.gcretailindetail.com/noticias-cadenas-de-mexico/autoservicios/Walmart/2013/06/04/Walmart-se-pone-verde-en-Tamaulipas-anuncia-proyecto-sustentable/
- *Noticias AM* (January 07, 2014) – "*Autorizan a Alfa un parque eólico*" (Alfa gets authorization for a wind farm) http://www.am.com.mx/notareforma/4253.
- *Tamaulipas state government website* (January 13, 2014) – "*Arrancará en 2014 construcción de tres parques eólicos en Tamaulipas*" (Three wind farms to begin construction in Tamaulipas in 2014) http://tamaulipas.gob.mx/2014/01/arrancara-en-2014-construccion-de-tres-parques-eolicos-en-tamaulipas/

The Project Sponsor has followed all public consultation requirements in order to comply with applicable environmental clearance and permitting processes. The Sponsor also created a website to inform the public about the Project.

[18] https://www3.opic.gov/environment/eia/tres_mesas/eia_tres_mesas.html
[19] http://www.fronterarenovable.mx/etmintro.