

INTER-AMERICAN DEVELOPMENT BANK

MEXICO

EDF LA VENTOSA/ LA MATA WIND ENERGY PROJECT

(ME-L1076)

**Environmental and Social Management Report
(ESMR)**

December 4, 2009

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Abbreviations

CDM	Clean Development Mechanism
CFE	Comisión Federal de Electricidad
CONANP	Comisión Nacional de Áreas Naturales Protegidas
EBA	Endemic Bird Area
EDF	Électricité de France
EHS	Environmental Health and Safety
EHSMP	Environmental Health and Safety Management Plan
EIA	Environmental Impact Assessment
EVM	Eléctrica del Valle de México
IDB	Inter-American Development Bank
INAH	Instituto Nacional de Antropología e Historia
IUCN	International Union for Conservation of Nature
LC	Least Concern
NT	Near-Threatened
SEMARNAT	Secretaría de Medio Ambiente y Recursos Naturales
USAID	United States Agency for International Development

1. INTRODUCTION

1. This 67.5 MW wind farm in the La Ventosa region of the State of Oaxaca, Mexico is being developed and owned by a special purpose limited liability company, Eléctrica del Valle de México, S. de R.L. de C.V. (“EVM”) at a project cost of approximately US\$198 million. EVM is an affiliate of Électricité de France (“EDF”). The IDB and IFC have joined forces to each consider providing up to the Mexican peso (“MXP”) equivalent of US\$30 million in senior debt to the Project.
2. The Project is being developed under Mexico’s self-supply framework and will sell its energy to four Wal-Mart de México subsidiaries (“WMS”) under 15-year electric energy self-supply agreements. Each of these Wal-Mart entities owns a partnership interest in EVM in order to meet the self-supply regulations.
3. The 10-year average predicted energy output of the Project is 291.7 GWh/annum with a net capacity factor of 49%.

2. PROJECT DESCRIPTION

4. The La Mata & La Ventosa Wind Project (“the Project”) consists of the construction and operation of 27 wind turbine generators with a nominal capacity of 2.5 MW each (67.5 MW total capacity), associated control and transmission facilities and a 115 kV overhead transmission line from the Project site to the Juchitán II substation. Each tower is 80 m high and includes a rotor of 89 m of diameter (maximum height: 124.5 m). The towers are located along two rows, one of about 4.8 km including 20 generators (Linea La Mata), the other of approximately 1.7 km with 7 generators (Linea La Ventosa), at about 16-20 kilometers from Juchitan de Zaragoza, State of Oaxaca. See Annex I for maps of the location of the Project
5. The generators will be connected to the on-site 115 kV substation through an underground electrical network. The on-site substation is located along the La Mata row, at about 1 km from the road crossings, adjacent to a recently built toll road. The new 115 kV transmission line will be about 10 kilometers long, and mostly follows the existing CFE transmission line to Juchitan II substation which will be replaced by the new line. The new line will be owned and operated by CFE. The Project also includes construction of a non-asphalted access road along the two rows of generators (7.4 km x 8 m), and requires for each tower an area of about 1600 m² for erection and maintenance purposes. Transport of towers and blades from the Salina Cruz harbor on the Pacific coast to the Project site did not require any upgrade of the existing road network. The total permanent footprint of the Project is estimated to be approximately 114,000 m² (11.4 hectares).

6. The Project is currently finishing construction. The access road and tower foundations are complete, and all of the tower and wind generators have now been erected. The Project is expected to start operations by the end of the year.
7. Wind resources in Oaxaca are among the best in the world due to a mountainous topography that levels off at a point where the land mass tapers down to a narrow isthmus. This creates a natural wind tunnel for air currents flowing between the Gulf of Mexico and the Pacific Ocean. As a result of these excellent wind conditions, development of wind energy projects in the La Ventosa region is attractive, and several large-scale projects are either in planning, construction or operational phase. Approximately 143 MW of private wind auto-generation capacity were erected at three wind farms during 2008. These include the first 37 MW of the 250 MW Eurus wind farm developed by Acciona Energia, which will supply 25% of Cemex's electricity; the first 79.9 MW of Iberdrola's La Ventosa wind project; Gamesa Energia's first 26 MW unit of its Bii Nee Stipa wind farm. The Iberdrola and Gamesa projects are adjacent to the Project's site. The *Federal Commission of Electricity* (CFE) also has a pilot wind power plant with a capacity of 1,575 kW, operating since 1994 (La Venta). An 83.5 MW expansion (La Venta II) was commissioned by CFE in January 2008. In March 2009, Iberdrola has secured a power purchase contract from CFE for the La Venta III project (102.85 MW). Construction will start in 2009 and the facility is expected to come on stream in November 2010.
8. The Project is localized in the land of two *Ejid*os: La Mata (185 *Ejidatarios* and 18 people with possession rights) and La Ventosa (176 *Ejidatarios*, 30 people with possession rights). Each *Ejido* comprises two types of land: individual plots and common land. In La Mata 40% of the individual plots and 100% of the common use land has been contracted, with individual *ejitadarios* signing standard usufruct contracts for the individual plots to be used by the Project. In La Ventosa 35% of individual plots and 80% of common use lands has been contracted, again with the individual landholders signing standard usufruct contracts for the individual plots to be used by the Project.. Since the construction and operation of the wind generators requires only a very small portion of the land that has been contracted by the project the *ejidatarios* will continue to use the remaining areas. The contracts with the *ejidatarios* provide for different payment rates, depending on the stage of implementation of the project, i.e. payments made before construction in order to reserve the land, payments during construction and payments made during operation.
9. The Project was originally identified in the mid-nineties, and at this time negotiations were initiated with the *ejidatarios* of La Ventosa and La Mata in order to reserve the land for future wind farm development. The alignment of the rows was subsequently modified to avoid the land of the *Ejidatarios* who had declined to sign the individual usufruct contracts. It should also be noted that the Project was initially designed to work with 75 generators, each with a nominal capacity of 900 kW, which would have been located along the same rows as in the current design. This was later modified in order to adopt more up-to-date technology (i.e. bigger generators), thus reducing the project footprint.

3. INSTITUTIONAL AND REGULATORY CONTEXT

10. The General Law for Ecological Equilibrium and Protection of the Environment (“Ecology Law” hereafter) was passed in 1988 and established the overall framework for industrial requirements and associated fines and penalties for noncompliance. The Ecology Law was amended several times since, and the currently applicable Ecology Law is the consolidated version of July 2007¹. The Ecology Law requires that for certain projects an Environmental Impact Assessment (EIA) (“*Manifestación del impacto ambiental*”) be prepared and reviewed by the Ministry of Environment and Natural Resources (“*Secretaría de Medio Ambiente y Recursos Naturales*”) (SEMARNAT) before an environmental permit can be issued. Article 28 of the Ecology Law, which lists the sectors and areas of economic activities that require an EIA and prior review by SEMARNAT, includes power generation facilities.
11. In order to comply with the Ecology Law, an EIA was carried out in 2003 for the Project based on its initial design, i.e. 75 generators with a nominal capacity of 900 kW each, and submitted to SEMARNAT. The Project was granted an Environmental Permit in June 2003. The Environmental Permit has been extended several times by SEMARNAT, in 2004, 2005, 2007, 2008 and 2009.
12. The Environmental Permit has been modified by SEMARNAT in July 2008 to incorporate the modifications in design mentioned above (i.e. changes in number and capacity of the generators, and height of towers), and includes new provisions for further assessment and monitoring of potential impacts during operation (noise, impacts on migratory birds). More specifically the updated license requires the Company to (i) carry out before construction and during operation a monitoring program on birds including population diversity and distribution, flight patterns, nesting areas, estimated risk of collision with turbine blades and towers, and proposed mitigation measures; and (ii) run a noise model to confirm that noise at closest receptors will be within permissible limits and monitor noise level during operation.
13. Results of birds monitoring activities and estimated collision risks carried out for the Project in October-November 2007 and March-May 2008 by an independent ornithologist, and results of the noise model have been provided to SEMARNAT. An Environmental Management Plan (EMP) for the construction phase has been developed in October 2008 and also provided to SEMARNAT.
14. In reference to land negotiations with Ejidos, the law that is applicable is the Agrarian Law which was passed in 1992 and established the framework for Ejidos land, including definition, land heritage, uses, usufruct, division and rights of Ejidatarios. Pursuant to Article 79 of the Agrarian Law, Ejidatarios are entitled to enter into

¹<http://www.semarnat.gob.mx/leyesynormas/Leyes%20del%20sector/LEY%20EQUILIBRIO%20ECOLÓGICO%20Y%20LA%20PROTECCIÓN%20AL%20AMBIENTE%20ACT%205%20JUL%202007.pdf>

usufruct contracts in respect of their own plots of land. Furthermore, pursuant to Article 23, paragraph V, of the Agrarian Law, ejidos are entitled to enter into usufruct contracts in respect of common use lands.

15. The Project triggers the Directives B.3-B.7, B.9, B.11 and B.12 of the IDB's OP 703 Environment and Safeguards Compliance Policy, and the IDB's OP-765 Indigenous People Policy.
16. Taking into account the project's potential impacts and the requirements outlined in IDB's OP 703 Environment and Safeguards Compliance Policy, the Project has been classified as a Category B operation.

4. ENVIRONMENTAL AND SOCIAL CONDITIONS

Environmental Conditions

17. The Project region is generally flat with an average elevation of approximately 50 m and it is bordered in the north and northeast by hills with elevation ranging from 200 m to 700 m. The average annual temperature in the project's area is 27.4°C. Maximum temperatures (29.5°C) occur in May and minimum temperatures (25.1 °C) in January. The rainy season occurs from June to September. Average annual rainfall in the project's area is 934.1 mm. The Project area shows average wind speeds from 9.8 m/s to 11.8 m/s. Average wind speeds during the year show a relatively bi-modal breakdown between months of strong wind speeds from September to March and months of milder wind speeds from April to August. Predominant wind direction is north with a lower proportion of south-easterly winds.
18. The Project does not overlap with any protected area. The nearest Federal protected area is the "Parque Ecológico Regional del Istmo" decreed by SEMARNAT as a protected area on February 14th, 1998. This protected area occupies 183.91 hectares inside the Juchitán de Zaragoza and El Espinal municipalities. It is located 15 kilometers southwest from the power line proposed by EVM. Besides the Federal Protected Areas, SEMARNAT certifies private natural protected areas through the CONANP. The areas are established, administered, and managed by the land owners who promoted them as protected areas. The nearest certified area is the "Sierra Tolistoque", located more than 3 km northeast of the Project area.
19. The natural ecosystems within the Project site have been significantly disturbed prior to construction of the Project, presenting small patches of low deciduous forest located solely through the power line right of way and between agricultural parcels where the turbines are to be installed. The rest of the area does not show native vegetation. It is formed mainly by agricultural parcels, essentially sorghum cultivation (La Mata), and pastures dedicated to livestock. No threatened, vulnerable, or endangered terrestrial species have been recorded in the Project's site or in its surroundings.

20. The Isthmus of Tehuantepec has been classified as Endemic Bird Area (EBA) by Birdlife International², and some bird species endemic to the Isthmus of Tehuantepec, in particular the Cinnamon-tailed Sparrow (*Aimophila Sumichrasti*) listed in the Near Threatened (NT) category in the 2008 IUCN Red List, are known to nest in the remaining patches of low deciduous forest found in some areas of the Project's site. This has been taken into account in the siting of the towers, which avoids creating disturbances to this type of vegetation.
21. The project is located on a plain approximately 40 km inland from the Pacific Coast near the town of Juchitan de Zaragoza in the Isthmus of Tehuantepec. Portions of the Isthmus form part of a bird migration corridor which connects Atlantic to the Pacific Coasts. It is known that for several bird species 100 % of their population migrates through the Isthmus each year (spring and fall migrations)³. According to results of bird monitoring activities carried out in October-November 2007 and March-May 2008 the Project's site is not located within a high bird traffic zone in either the fall or spring seasons but is adjacent to the most important migratory flyways in the region, those being along the Sierra de Tolistoque and through Paso Chivela to the North, and the southern part of the coastal plain along the Pacific slope. During the survey, about 593,500 individual birds were recorded with only 8 % of these individuals actually flying over the Project site. More than 99 % of the birds observed flying over the Project site correspond to the following four species, all of them in the Least Concern (LC) category of the UICN Redlist: Turkey Vulture (*Cathartes Aura*), Swainson's Hawk (*Buteo Swainsoni*), Broad-winged Hawk (*Buteo Platypterus*) and Franklin's Gull (*Larus Pipixcan*).

Social Conditions

22. Population distribution is largely concentrated in the political and economic centers that serve as the municipal capitals, accounting for more than half of the overall municipal population. These local capitals are identified with the same name as their respective municipalities: Asunción Ixtaltepec, where the La Mata Ejido (760 persons according a 2005 census) is located, and Juchitán de Zaragoza, where the La Ventosa ejido (2148 persons according a 2005 census) is located. The closest population center (La Ventosa) is located more than one kilometer from the Project's site boundaries.
23. Indigenous groups have a very important presence in the Project area, accounting for almost 60% of the overall population in Juchitán de Zaragoza and over 45% of the overall population in Asunción Ixtaltepec. The most abundant indigenous group in the Isthmus of Tehuantepec is the Zapotec. The two localities within the Project's area, La Ventosa and La Mata ejidos, have a large part of their population that speaks Zapotec. Most of the Ejidatarios of La Ventosa and La Mata also speak Spanish, have a good access to services, and seem to be well integrated in the broader society.

² See <http://www.birdlife.org/datazone/ebas/index.html?action=EbaHTMDetails.asp&sid=13&m=0>

³ "Reporte Final Del Estudio de Aves Residentes y Migratorias en el Proyecto Eolico La Mata – La Ventosa, Oaxaca", EVM, June 2008.

24. The ejido system is the predominant land tenure system in the Project area. It allows for large extensions of land to be communally owned by a group of local inhabitants that must make decisions on land-use collectively while maintaining individual control of specific parcels. This system has developed into a politically significant figure as it emerged in the last century as one of the main results of the Mexican Revolution, which largely focused on land distribution and ownership. Land is primarily used for agricultural production, with cattle-raising activities being the most common.
25. EVM has commissioned a survey of existing or potential archaeological sites in the area to be developed and concluded that there are no important resources or artifacts in the Project's area of influence. This survey has been done through the National Archeology and History Institute (INAH), as mandated by Mexican law, and this authority has therefore granted permission to proceed with the proposed activities. Any possible chance findings would have to be reported immediately to INAH for additional investigation and clearance. No chance findings have been reported so far.

5. ENVIRONMENTAL AND SOCIAL IMPACTS

Environmental and Social Impacts during Construction

26. The environmental impacts related to construction activities (e.g. soil erosion, noise, dust generation, traffic disruption) are of limited significance, and can be mitigated through routine standard procedures. Areas temporarily used or disturbed during construction will be reinstated at the end of construction, and the permanent footprint of each tower and the roads is relatively small. Occupational health and safety hazards specific to wind energy facilities and activities primarily include working at heights. Hazards associated with working at heights can generally be prevented with an adequate health and safety management system.
27. More specifically natural surface drainage has been temporarily interrupted due to land clearing and compaction activities; therefore erosion, flooding, and lack of water in adjacent properties could occur. Loss of fertile topsoil layer on site due to land clearing and leveling activities could also be one of the most significant environmental impacts related to construction. From visual inspection of the project site, there does not seem to be any significant outstanding soil contamination due to the hazardous and non-hazardous wastes generated during construction⁴, as well as to the hazardous materials used by the construction personnel in work zones, chemical and material warehouses, and maintenance areas.
28. In each ejido there exist two types of lands: individual plots of land and common use lands. In La Mata ejido the project has leased 40% of the individual plots of land and 100% the common use lands. In La Ventosa ejido, the project has leased 35% individual plots of land and 80% of common use lands. The land required for construction and operation of the Project occupies only a very small portion of the

leased land, and the sponsors have no use for the remaining land. The leasing contracts expressly authorize the land owner to continue using the land for agricultural purposes, so long as such activities do not affect the project's construction and operation.

29. No physical or economic displacement caused directly by the project has taken or will take place. Adverse impacts on livelihoods are minimal since the actual footprint of the project on the land (both during construction and operation) is very limited (about 11.4 hectares), and previous land users have been and will be able to continue their past agricultural activities such as grazing and crop cultivation mostly undisturbed.

Environmental and Social Impacts during Operation (including maintenance)

30. As mentioned earlier, sections of the Isthmus of Tehuantepec, where the Project is generally located, are of global significance for migratory birds. The operation of wind turbines may result in collisions of birds with wind turbine rotor blades and towers, potentially causing bird mortality or injury. According to results of bird monitoring activities carried out in October-November 2007 and March-May 2008, the migratory raptors observed on the Project's site, including the Turkey Vulture, the Swainson's Hawk, and the Broad-winged Hawk, generally flew at considerable altitudes, usually more than 300 m above the ground, and that therefore the collision risk with the wind turbine rotor blades and towers is considered is probably very low. It is interesting to note that the birds monitoring report covering the first year of the CDM crediting period (July 2007-June 2008) for the 83 MW La Venta II wind project located at about 10 km from the Project site reports 43 bird collisions on a total of 267,000 individual birds crossing the La Venta II project's site⁵, a ratio which is insignificant on a species level population viability impact. It should also be noted that the La Venta II site is more sensitive as compared to the EDF site as it is situated closer to the base of the Sierra Tolistoque..
31. However strong winds as experienced in this area may at times cause birds to fly at lower altitudes and in unintended directions. Such conditions may therefore significantly increase the risk of collision with the wind turbine rotor blades and towers. According to results of bird monitoring activities, the main species that exhibit such a behavior with strong winds from the north is the Franklin's Gull (*Larus Pipixcan*), which formed the majority of individuals flying across the Project's site at an altitude presenting a higher risk of collision with the rotor blades and towers. While this gull is not endangered and it is anticipated that potential impacts will not threaten species population viability, the potential impact of Project's operation on the Franklin's Gull requires adequate ongoing monitoring and mitigation.
32. Besides as mentioned earlier there are several other wind farm projects in construction and in operation adjacent to the Project's site. Potential cumulative impacts of those wind farms on migratory birds, and their significance at the species level is currently unknown. The IDB has undertaken in cooperation with SEMARNAT a study to assess the cumulative impact and cumulative collision risk of

⁵ <http://cdm.unfccc.int/UserManagement/FileStorage/0M124HQF6T9CLBVWRZJADGN7PEUSKX>

development of large scale wind power projects in the LaVentosa/La Venta area of the Isthmus of Tehuantepec. This study is currently underway and when completed its main results will be presented to various stakeholders, including SEMARNAT, wind power project developers and key birds NGOs. Due mainly to the project's location vis a vis the main migration corridors and resident bird habitat the Project's contribution to the cumulative impact on birds is not expected to be significant. However the project will be required to implement a Monitoring and Emergency Shutdown mechanism, including independent monitoring (see section 6), to reduce the potential for bird collision, including on the Franklin's Gull, and other relevant mitigation measures that would ensure that the Project's impact on migratory birds is not significant.

33. Potential noise impacts caused by the wind turbines during operation on adjacent communities are not expected to be significant. As a generally recognized rule of thumb⁶, it is considered that the additional noise level from a wind turbine over background noise is not significant at a distance of 3 times the blade tip height, i.e. about 475 m for the type of wind generator used for the Project. The closest noise receptor outside of the project site boundary is located at about 1 km from a wind turbine. This will be further verified through the periodic monitoring of noise level to be carried during the Project's operation, including at the site's boundaries.
34. Maintenance activities during operation may cause accidental discharge of hazardous materials (e.g. from changing the oil in the generator) or trigger occupational health and safety concerns (working at heights). These potentials impacts and risks will be addressed in the context of the Project's Environmental Health and Safety (EHS) Management System (see section 6).
35. Community health and safety hazards specific to wind energy facilities primarily include: aircraft and marine navigation safety; electromagnetic interference and radiation. Risk of such hazards is not considered significant in the context of the Project. Since affected communities will continue their agricultural activities on the land where the Project is located, increased community health and safety hazards related to public access may not be insignificant, and will need to be adequately addressed in the Project's EHS system, including through appropriate risk prevention procedures during maintenance activities, and emergency planning.

6. ENVIRONMENTAL, SOCIAL, HEALTH AND SAFETY MANAGEMENT

Environmental Management

36. Construction activities are almost complete on the Project's site, and no significant environmental liability has been reported. The most important environmental management activity still to be completed is the reinstatement of the areas temporary affected by construction, , including restoring an adequate drainage and erosion

⁶ http://www.windpoweringamerica.gov/pdfs/workshops/mwwg_turbine_noise.pdf

control system, and cleaning up of any soil contamination. EVM has also developed a draft reforestation program that still needs to be validated by SEMARNAT and implemented on site.

37. The most significant potential environmental impact that needs to be carefully managed during Project operation is the birds collision risk. The Project will be required to implement a Monitoring and Emergency Shutdown mechanism during operation to reduce bird collision risk and ensure that the Project's impact on migratory birds is not significant. This mechanism will include the following components:
- a. real time monitoring arrangements, either by radar or by human observation or a combination of both, during high migratory seasons (second week of April to second week of May; and second week of October to third week of November);
 - b. an Emergency Shutdown process to shut down temporarily the wind turbines when the real time monitoring system detects flocks of migratory birds at risk of collision with the Project's rotor blades, based on objective parameters, such as species at risk, number of individuals, flight altitude and path. The results of the collision risk assessment currently underway in the context of the cumulative impact assessment study will be used to consider initial parameters to be used for this process. It is expected that the Franklin's Gull will be considered as a species at risk due to its low flight altitude in adverse wind conditions;
 - c. arrangements for monitoring of actual collision;
 - d. an independent review once a year of the emergency shutdown process parameters on the basis of the results of real time monitoring during migratory seasons and actual collision.
38. Other potential environmental impacts during operation will be addressed in the context of the Project's Environmental Health and Safety (EHS) Management System.

Social Management

39. The Company has entered good faith negotiations with both Ejidos and individual Ejidatarios, which resulted into fifty-seven 30-year "usufruct contracts" with the Ejido La Ventosa and the Ejido La Mata in respect to both common use land and individual Ejidatarios lands.
40. The Project has been paying to Ejidos and Ejidatarios an annual fixed reservation fee since beginning of the usufruct contracts, and at the start of construction an annual fixed compensation fee for the land permanently affected. When operation commences, the Project will pay an increased fixed fee to all Ejidatarios located in the "area of influence" (about 500m along the row of generators) which have an usufruct contract with EVM.
41. Overall, due to (i) the small footprint of the actual disturbance of the Project on land, and (ii) the usufruct agreements that enable land owners to continue owning their land

and land users to continue using the land for agricultural purposes while receiving fees from EVM during all the duration of the usufruct contract, the Project is expected to benefit directly the Ejidatarios that own land in the Project's area of influence and have contracted with EVM, and indirectly all the Ejidatarios of La Mata and La Ventosa. As such the Project is consistent with the requirements of IDB's Indigenous Policy (OP-765).

42. Furthermore, it is interesting to note that according to a study⁷ carried out in 2003 by Winrock International and financed by USAID Mexico on land leasing arrangements for wind power development in the the Isthmus of Tehuantepec, fixed fee arrangements (in contrast to royalty arrangements) benefit landowners by offering steady, predictable income and protection in years of low electricity generation or revenue, as well as completely transparent calculation of the compensation or payment.
43. Building on the robust relationship between the Project and the communities of La Ventosa and La Mata, EVM will develop a Community Development Plan that focuses on social investment and supporting the creation of conditions for local inhabitants to improve their livelihoods in a self-sustaining and non-dependent manner. The plan should incorporate the special considerations of an Indigenous People's Development Plan, especially as it pertains to the usage of Zapotec language and the observance of ethnic traditions in the design of development schemes. The plan should list, prioritize, describe, and categorize initiatives that are well-aligned with EVM's objectives and resources in the project area, the communities' main demands, and the social development needs observed in the communities.

Health and Safety Management

44. Increased community health and safety hazards will be managed through appropriate risk prevention procedures during maintenance activities, and emergency planning.

Environmental, Health and Safety Management System

45. VM will develop and adopt an Environmental Health and Safety (EHS) Management system that will address all potential environmental impacts and health and safety risks (both occupational and for the communities) related to the project's operation.
46. The EHS Management System will cover organisational responsibilities, training, auditing, monitoring, and reporting arrangements, and resources to be made available to ensure adequate implementation of the environmental, health and safety plans and programmes.

7. PUBLIC CONSULTATION

47. Consultation of and negotiations with affected parties has been a transparent and open process. The Project started negotiations with Ejidos landowners of La Ventosa and

⁷ Winrock International, "Information About Land Leasing and the Potential for Job Creation Related to Wind Energy Project Development in Mexico", April 2003.

La Mata in order to reserve land for future wind developments in the mid-nineties. The approval from the Assembly of Ejidatarios to start feasibility studies for the Project was sought from both ejidos in 1993. A first draft of the usufruct contract was presented to both Assembly of Ejidatarios in 1994. Agreements were signed with both Ejidos respectively in April and June 2002.

48. The EIA for the Project was submitted in 2003 to SEMARNAT, which disclosed it on its website. There had no been however no formal public meeting organized with interested parties at this time.
49. The project will develop a stakeholders engagement strategy to ensure that stakeholders at different levels (including the population in the municipal capitals) will receive proper attention and follow-up from EVM in a systematic way. This strategy will help communicate the project's positive social impacts and mitigate any identified negative impacts. The everyday engagement the Project already has with most significant stakeholders will benefit from being incorporated into a structured set of actions and objectives while additional stakeholders not yet engaged will also be addressed through this strategy.
50. In addition, building on this strategy EVM will establish an appropriate grievance redress mechanism suited to the different stakeholders characteristics. These mechanisms will allow for early detection of any potential social conflicts in order to put forth effective proactive actions to address them.

8. RECOMMENDATIONS

51. Prior to First Disbursement of the Loan, EVM shall submit the following documents, in form and substance acceptable to the IDB:
 - a. Evidence that the reinstatement of the areas temporary affected by construction activities, including restoration of an adequate drainage and erosion control system, cleaning up of any soil contamination, and initial revegetation (topsoil restoration and initial planting of local species) is significantly advanced;
 - b. a Preliminary Birds Monitoring and Emergency Shutdown Plan aiming at ensuring that the Project's impact on birds is not significant;
 - c. an Environmental Health and Safety Management Plan (EHSMP) for the Project's operational phase, including: description of EVM's Environmental Health and Safety Management System; procedures for the management of hazardous waste (e.g. used oil); occupational health and safety procedures for maintenance activities; community health and safety procedures (risk prevention procedures during maintenance activities, and emergency planning); monitoring and reporting arrangements;

- d. An Integrated Social Management Plan consistent with the requirements of IDB's OP-765 Indigenous People Policy and addressing the following issues: Land/Easement Acquisition and Compensation; Public Consultation and Disclosure; Grievance Redress Mechanism; Community Development Framework; and Monitoring and Evaluation.
- 8.4 Prior to each disbursement, EVM shall certify compliance with all environmental social, and health and safety requirements in the loan agreement.
- 8.5 During the life of the Loan Agreement, EVM must prepare and submit an Environmental and Social Compliance Report, in form, content and frequency acceptable to IDB.
- 8.6 The Bank will monitor the Project's environmental, health and safety, social and labor aspects via internal Bank supervision actions (e.g., site visits, review of documentation, etc.). In addition, the Bank will have the right, as part of the Loan Agreement, to contract for the performance of an independent environmental, health, and safety audit, if needed.

ANNEX I PROJECT LOCATION



