INTER-AMERICAN DEVELOPMENT BANK

URUGUAY

EL LIBERTADOR WIND POWER PROJECT
(UR-L1077)

Category B Project

Environmental and Social Management Report
(ESMR)

April 2012

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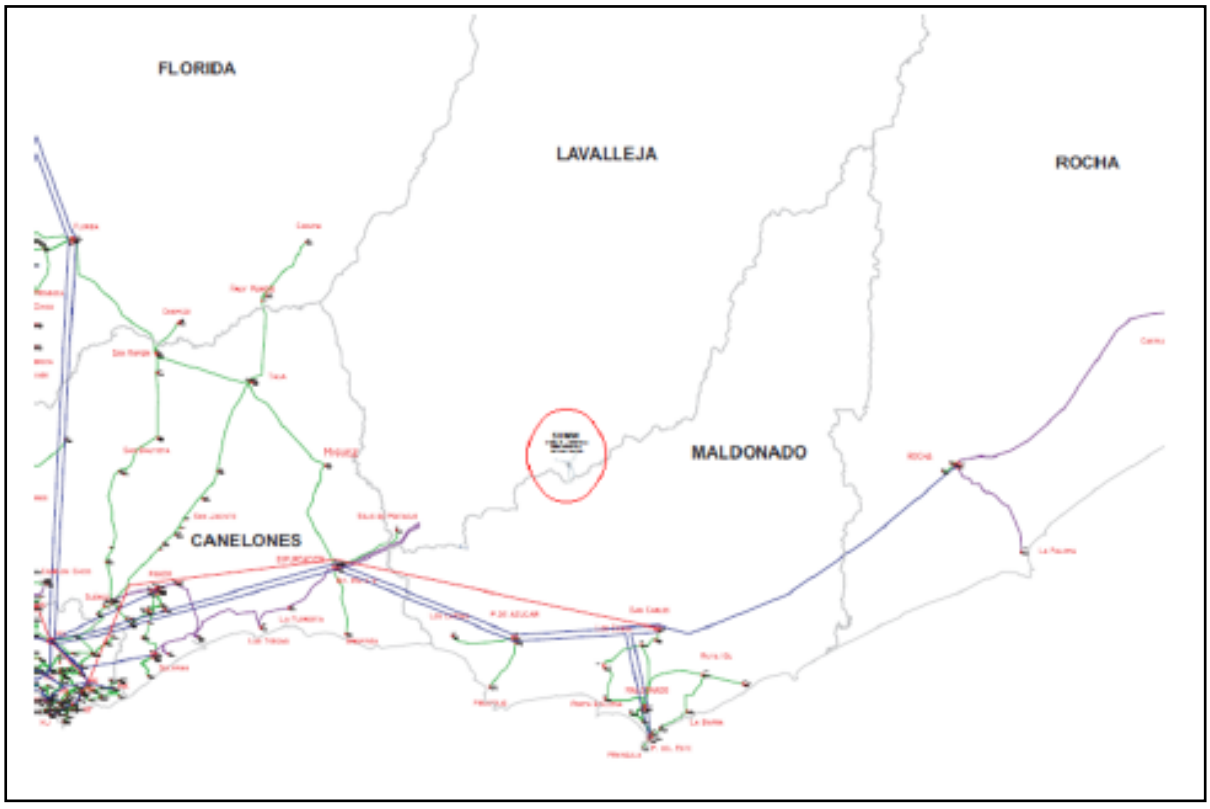
I. INTRODUCTION

1.1 Jistock S.A., the Borrower, is seeking financing from IDB (up to US$ 66 Million) for the construction, operation and maintenance of a 66 MW wind farm and associated infrastructures to be built in the Department of Lavalleja and Maldonado in Uruguay (the "Project"). Total project's costs are estimated at US $ 169 Million.

1.2 The wind farm will be located in the Department of Lavalleja, approximately 10km south of the city of Minas (see Figures 1 and 2). The Project entails the implementation or construction of the following components: i) erection of 44 IMPSA–IV77 wind turbines with a nominal capacity of 1.5 MW each; ii) construction of the wind park substation iii) a transmission line of 19 km (63 kV) to connect the wind farm to the national grid; iv) six separate transmission lines totalizing 25 km within the wind concession area and v) construction of maintenance and service roads (25 km) within the wind concession.

Figure 1. Project Location



II. PROJECT DESCRIPTION

2.1 The Project includes the following components: a) erection of 44 IMPSA-IV 77 wind turbine generators with a nominal capacity of 1.5 MW each; b) the construction of the wind park substation; c) construction of a 19 km transmission line to connect to the national grid; d) six separate transmission lines totaling 25 km within the wind concession area; and e) civil engineering works including construction of maintenance and service roads totaling 25 km within the wind concession. The Project consists of three subprojects: El Libertador I, II, and III. El Libertador I will be the largest subcomponent consisting of 34 generators with a total capacity of 51 MW; El Libertador II and III, combined, will consist of ten generators with a total capacity of 15 MW. The information provided below has been obtained from the EIA for the El Libertador I project and does not include potential impacts related to the El Libertaodr II and III projects. The EIA for the El Libertador II and III projects are not yet complete.

a) Wind Turbines: The 44 IMPSA-IV77 wind turbines to be installed on the site will have a tower height of 100 m and a rotor diameter of 77 m (see Figure 3 for site layout). Each rotor contains three blades and has a swept area of approximately 4657 m^2. The IMPSA-IV77 has a start-up wind speed of 3 m/s and a cut-out wind speed of 22 m/s. The turbines will each occupy an area of 0.09 ha for the foundation. A total of 3.96 ha will be occupied by the 44 turbines and a small area surrounding each turbine will be cleared for service and maintenance at each turbine location. Concrete for the foundations will be supplied from an existing batch plant in Minas.

b) Substation: The wind park substation (31,5/63kv) will be constructed to support the Project and will serve as the connection to the national grid. The substation will occupy an area of approximately 0.5 ha.

c) Transmission Line: A 19 km-long 63 kV above ground transmission line, with a one km-long 63 kV underground transmission line to cross under National Route 12 will connect the project to the Uruguayan national grid (UTE). Originally, a 12 km-long transmission line was designed and described in the EIA (see Figure 4 for the current transmission line alignment). Negotiations with the land owners have not yet occurred in order to agree land lease terms. The consultation and negotiation process for the transmission line will be conducted by UTE; due to the relatively short length of transmission line, very few owners are expected to be impacted. According the regulation 349 of the Ministerio de Vivienda ordenamiento territorial y medio ambiente (2005) consultation for transmission lines below 150 kV is not required in Uruguay; however, the Bank does require consultation with affected parties. The consultation

process will be monitored by the Bank and land lease agreements, when finalized, will be provided to the Bank.

d) Separate Transmission Lines: Six smaller overhead transmission lines, each 31.5 kV, will be installed to connect the individual generators to the 63 kV transmission line. These smaller transmission lines will have a total length of 16 km. Each generator will be connected to one of the smaller transmission lines with an underground cable approximately 50 m in length.

e) Access Roads: A total of 25 km of access / maintenance roads, some of which currently exist, will be constructed and/or maintained to allow access of heavy construction equipment and supplies as well as long-term service and maintenance of the wind farm. The roads will remain unpaved.

2.2 A workforce of approximately 320 people is expected, on average, with a maximum of 380 employees during peak construction. Nearly all of the workforce will be comprised of local workers from the neighboring communities, particularly Minas, only ten km away. As the majority of the workforce will be local, no worker camps will be constructed. Two shifts will be required during operations, a day shift comprising 12 workers and a night shift consisting of eight employees..

III. INSTITUTIONAL AND REGULATORY CONTEXT

3.1 In April 2011, the relevant environmental authority in Uruguay, DINAMA, granted the Declaration of Environmental Viability to the Project and classified it as a Category B operation. According to regulation in Uruguay, an environmental impact assessment (EIA) is required for a Category B project. The EIA reviewed by the Bank is dated June 2011 but does not include all aspects of the project including ten additional turbines and the transmission line. The EIA has been submitted to DINAMA; however, the acceptance of this document and the emission of the environmental license appear to be still pending. An additional EIA for the El Libertador II and III projects will be submitted to DINAMA following approval of the El Libertador I EIA.

3.2 The Project triggers the following directives of IDB's OP-703 Environmental and Safeguards Policy: B.2, Country Laws and Regulations; B.3, Screening and Classification; B.5, Environmental Assessment; B.6., Consultation; B.7, Supervision and Compliance; and B.9 Natural habitat. The OP-702, Disclosure of Information Policy also applies for this Project. Based on available documentation, it is not expected that OP-710 on involuntary resettlement will be triggered for this Project. However, the public consultation regarding land acquisition has not been conducted for the Right-of-Way of the transmission line. UTE controls (UTE owns and operates the transmission line; but the Project will construct it) all transmission lines within Uruguay and will conduct the public consultation with the affected landowners. As the impacted lands are all grazing

lands, it appears only lease agreements will be required with the affected property owners; however, if some houses will need to be resettled and, if significant economic displacement will be caused by the Project, the policy will be triggered. The Project had been classified by the Bank as a Category B operation.

IV. ENVIRONMENTAL AND SOCIAL CONDITIONS

4.1 The Project is located approximately 10 km south of the city of Minas in southern Uruguay, an area whose mountainous topography creates an area rich in wind resources. Other wind power projects have identified the area as a rich resource and additional large-scale wind farms in the same general area are currently in the development stage. The Minas I project is just one example of these projects in the area.

4.2 According to the EIA, the wind concession covers an area of approximately 1,709 ha, of which a total of 15.22 ha (less than 1.0 %) will be permanently affected by the construction of the wind turbines, maintenance roads, internal transmission lines, and the substation. The overall wind concession area had already been impacted by human activities, primarily agriculture and cattle grazing. The landscape appears to be mostly composed of pasture lands with some eucalyptus groves that have been planted over the years apparently as small-scale, private agroforestry projects.

4.3 On its northern section, the wind concession area overlaps with an Important Bird Area (IBA), the Serrania del Este for 5.6 ha or 0.3 % of the total wind concession (see map 2). The IBA is home to the Carpinterito Enano (*Picumnus nebulosus)* and the Nandu *(Rhea americana)* a flightless bird similar to the ostrich; these two birds are listed as Near Threatened per the IUCN Red List. A bird baseline survey has been conducted in April 2011. A total of 52 species were observed in the wind concession area, with the exception of the Nandu, none of the other birds observed belongs to a conservation category that is of concern (the Carpinterito was not observed). According to the information available, the known migratory route is passing much further north of the limit of the wind concession area, likely in the upper part of the IBA. The Nandu had been observed (number of individuals observed is unknown) in a field located in the upper northern section of the wind concession where, according to the current layout, no wind turbines will be erected. No individuals of the species were observed within the wind concession area nor in surrounding areas during the due diligence site visit. Due to the short construction period and minimal habitat disturbance the impact to the rhea is expected to be minimal. Little is known concerning how a wind farm may impact the rhea, as such; the Monitoring Plan should include monitoring the number of individuals present in the area and document behavior patterns to determine if the turbines have any significant impact on the species. Since the bird is flightless it does not pose a collision risk.

4.4 Three species of amphibians that pertain to the IUCN Red List have been identified within the wind concession area. The San Martin frog (*Melanophryniscus san martini)* is Near Threatened, the Red Belly Toad (*Melanophryniscus orejasmirandai*) is Vulnerable, and the Black Spine-necked Swamp Turtle *(Acanthochelys spixii)* is Near Threatened. The species listed above favor semi-aquatic environments. According to information presented, the project will not install any turbines on semi-aquatic environment and maintenance roads will not be constructed over these sensitive areas. The Project's EMP and Monitoring Plan should ensure that construction activities do not create erosion patters which lead to sedimentation of these aquatic environments.

Social Conditions

4.5 The Project area is largely uninhabited; however, roughly a dozen domiciles do exist within the wind concession area. The locations of a few turbines (turbines 02, 13, 20, and 21) have been reconfigured in final design to avoid close proximity to these homes; however, a few of these home sites are situated within a few hundred meters of proposed turbine locations. A noise study was conducted and anticipated noise levels at all the domiciles fell within the acceptable range; however, this situation will have to be monitored to ensure the study results were accurate and noise levels remain at acceptable levels for the home owners, particularly as the project moves into the operations phase. A similar situation exists with regard to the "blinking effect" created by wind turbines during dawn and dusk hours. Any home owners adversely affected by noise or blinking effect will be able to register complaints through the Grievance Mechanism established by the Project.

4.6 Livelihood: Communities depend on agriculture and cattle ranching as the main source of income. The entire wind concession area consists of approximately 12 homeowners. Residents within the wind concession area and surrounding areas are generally wealthy and property values are high.

4.7 Access to Social Services: Property owners within the wind concession area live a very rural but wealthy lifestyle with fairly large ranch style homes surrounded by vast grazing land. All the homes in the immediate vicinity do have electricity, telephone and running water. For access to most social services residents must travel to Minas, ten km to the north. Minas is the largest city in the department of Lavalleja and has a population of approximately 40,000. Approximately 54 km to the south lies the city of Madonado, capital of the department of Maldonado. Both Minas and Maldonado have access to more social services including hospitals, police and fire stations, post offices, local newspapers, radio and television stations, hotels and restaurants.

4.8 Indigenous Peoples: There are no indigenous people living within the wind concession area, nor within the surrounding communities.

4.9 An Archaeological Impact Study was conducted for the Project. Some archeological artifacts have been located on the fringe of the wind concession area in an area referred to as "The Thread of Life", approximately five km south of the Project site. The EIA includes an annex on additional reconnaissance and excavation works conducted within the areas where turbines and underground cable will be installed. Based on these works, nothing had been found, however a precautionary approach should be taken. A chance-find procedure should be implemented during the Project's construction phase as recommended in the Archaeological Impact Study.

V. ENVIRONMENTAL AND SOCIAL IMPACTS AND RISKS

Potential impacts during construction

5.1 Potential negative environmental impacts and risks during construction phase will be mainly associated with the erection of the wind turbines, the installation of the transmission line, the substation and the access roads. Main construction impacts are: (i) habitat disturbance; (ii) soil erosion; (iii) dust generation; (iv) increase in heavy traffic; (v) noise; (vi) loss of vegetation; and (vii) occupational health and safety hazards for the workforce. Most of these construction impacts and risk can be adequately mitigated through the implementation of appropriate management plans.

5.2 **Transmission Line:** UTE owns and operates all transmission lines within Uruguay and therefore, the routing, permitting, and consultation is controlled by UTE and follows a different regulatory process than the wind farm. This process is ongoing and as such the potential site-specific impacts are not yet fully known. Generic potential environmental impacts and risks typically associated with the construction of a transmission line include: disturbance to habitat (flora and fauna) from clearing of the right-of-way, increased soil erosion, increased use of previously inaccessible areas, increase in heavy traffic from construction equipment, increase in dust, risk of collision for birds, and conversion of land use with visual impacts.

Potential impacts and risks during project operation

5.3 Once in operation, main impacts and risks are: (i) bird and bat collision; (ii) barrier effects to movement of birds; (iii) loss of vegetation; (iv) accidental discharges of hazardous materials; (v) community health and safety hazards; and (vi) noise impacts caused by the wind turbines.

5.4 One of the potential risks associated with wind power facilities is bird collision. The bird field study conducted in April 2011 near the end of the migratory season registered 52 species of birds within the wind concession area (12 % of the 446 bird species registered

in Uruguay). Desktop studies, however, indicated the potential presence of up to 269 species. Since the wind concession area does not lie within any migratory routes or important fly-ways, the risk of collision is expected to be low; however, no species level collision risk assessments were conducted. The post-construction monitoring will help in determining the risk of collision. It is anticipated that for the flightless rhea, due to the short construction period and minimal habitat disturbance, the impact to this species should be minimal; however, little is known concerning how a wind farm may impact the rhea. As such, the Monitoring Plan should include monitoring the number of individuals present in the area and document behavior patterns to determine if the turbines have any significant impact on the species. Since the bird is flightless it does not pose a collision risk.

5.5 Bats also face collision risk, and other risks, associated with wind farms; in fact, the incidence of bat mortality is generally higher for bats than birds, presumably because bats seem to be attracted to wind generators. Several theories exist for this phenomenon including: the bats view the tower as a potential roost site, dead insects on and near the generator are seen as an easy food source, the bats are attracted to the heat produced by the generator, and the sound and electromagnetism produced by the generator disrupts their echolocation. Additionally, bats face barotrauma, a condition resulting from a sudden change in atmospheric pressure (such as encountered near the rotor of an operational turbine), which causes their fragile lungs to expand beyond capacity leading to death. Bat field surveys were conducted in April 2011; however, no individuals were captured or observed. A desktop review identified several species (of the 20 species known to exist in Uruguay) with potential to exist within the wind concession area. None of these species appear as threatened or vulnerable on the IUCN List of Red Book Species. As with birds, the mortality to bats due to collisions with generators should be closely monitored and reported during operations.

5.6 The EIA identified three species of amphibians and reptiles potentially occurring in the wind concession area which pertain to the IUCN Red List. These include the San Martin frog (*Melanophryniscus san martini)* which is Near Threatened, the (*Melanophryniscus orejasmirandai*) which is Vulnerable, and the Black Spine-necked Swamp Turtle *(Acanthochelys spixii)* which is Near Threatened. Risks to these species will be minimized by avoiding construction in aquatic and semi-aquatic habitats.

5.7 The barrier effects are related to displacement. Displacement occurs when a species decreases or discontinues use of an area due to a human activity. The level of barrier effect depends on species, turbine layout, the species ability to compensate for losses in energy due to avoidance, and most importantly, the size of the wind facility and the presence of other wind farms in the region. The proposed project will have 44 towers but is located near other planned wind farms. In addition, it does not appear that the wind

concession area is crossed by a migratory route. As such, the barrier effect should not be significant.

5.8 Another impact will be the loss of vegetation within the concession area and along the new access roads and the 19 km transmission line. As mentioned previously, the habitat had been already significantly impacted by human activities. While the majority of wind concession area has been converted to pasture lands, there are some stands of native vegetation which may provide nesting habitat to various species of birds; these stands will be avoided during construction. The transmission line alignment also lies within modified pasturelands; however, the removal of some large vegetation is more likely, but this information has not been provided.

5.9 Maintenance activities during operation may cause accidental discharge of hazardous materials (e.g. from changing the oil in the generator, fuel leaks from maintenance vehicles or paint spills) or trigger occupational health and safety concerns (working at heights). These potential impacts and risks are easily managed and will be addressed in the Environmental Management Plan.

5.10 Community health and safety hazards specific to wind energy facilities primarily include: aircraft navigation safety; electromagnetic interference; and radiation. The potential of such hazards is not considered significant in the context of the Project since affected communities will continue their economic activities (grazing and agriculture) 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 Environmental Management Plan, including adopting appropriate risk prevention procedures and emergency planning during construction and maintenance activities.

5.11 Potential noise impacts caused by the wind turbines during operation on adjacent communities are not expected to be significant; however, there are some existing home sites within the Project area and near planned turbine locations which may require mitigation. Based on the noise study, three home sites may experience noise levels higher than the acceptable standard for night time of 45 dBA with winds in excess of 6.5 m/s. The home site with the highest noise potential is estimated to receive noise up to 46.6 dBA. Noise levels for all homes are within an acceptable range of day time hours. Las Minas, the closest community is approximately 10 km from the site. Noise level will be further verified through the periodic monitoring of noise level to be carried out during the Project's operation, including at the site's boundaries. Appropriate mitigation measures will be applied should noise levels exceed accepted standards.

5.12 **Land Acquisition and Physical Displacement:** The Project has already identified and secured the land required to install the turbines, substation, internal transmission lines and

access roads. These portions of the Project do not lead to any physical displacement or resettlement. Land contract lease agreements have been signed with the individual land owners where the turbines, substation, internal transmission lines, and access roads will be located. These lease agreements have not been reviewed by the Bank to ensure fair compensation was provided. The main transmission line is still in the permitting phase and consultation has yet to occur. It is anticipated that no physical displacement or resettlement will occur. Land lease agreements will have to be negotiated with the property owners. The Bank has requested to be updated on the consultation process, to be conducted by UTE, as it progresses.

5.13 **Cumulative impacts:** Cumulative impacts may exist in areas where multiple wind projects have been, or will be, constructed in close proximity to each other and within established migratory routes and corridors. There is currently one other wind farms in the general vicinity (UTE's Caracol facility); with the growing number of turbines planned to be erected in the area in the future, the risk and concern of cumulative impacts also grows. Currently, any cumulative impact study relating to bird collisions with wind turbines anywhere in the world, has been inconclusive due to the lack of data shared or otherwise obtained from the various wind farms in operation. Data for the monitoring efforts of this Project, as well as other projects will be helpful in determining the extent of cumulative impacts and developing and implementing corrective measures in case the impact is found to be significant.

5.14 **Greenhouse Gas Emissions:** This project will aid in the reduction of the carbon footprint of energy generation in Uruguay. The 66 MW project is expected to displace approximately 253,365 MWh per year of thermal power generation resulting in an estimated savings of 174,541 tCO^2 per annum, based on an emission factor of 0.71 tCO^2/MWh.

5.15 **Social Impacts During Construction:** Overall, the Project will have positive social impacts as many residents from Minas will obtain steady employment during the two-year construction period. Additionally the wind concession area is sparsely populated; thus reducing the number of potentially affected people. Typical impacts including noise emissions, dust control and traffic management are easily controlled utilizing standard procedures which will be included in the EMS.

VI. ENVIRONMENTAL, SOCIAL, HEALTH AND SAFETY MANAGEMENT

6.1 **Environmental and Social Management System (EMS):** The Company will manage environmental and social impacts through the implementation of an EMS. The EMS contains the following elements: (i) social and Environmental Assessment; (ii) management program; (iii) organizational capacity; (iv) training; (v) community

engagement; (vi) monitoring; and (vii) reporting. In the context of accepted international frameworks for quality and environmental management systems, this management process can be summarized as follows:

- Identification and review of the social and environmental impacts and risks of the operations;
- Definition of a set of policies and objectives for social and environmental performance;
- Establishment of a management program to achieve these objectives; and
- Monitoring performance against these policies and objectives.

6.2 As part of the EMS, the company will need to develop a supervision mechanism and performance assessment of the various contractors retained for the construction phase, including the post construction monitoring of birds and bats. Monitoring of bird and bat mortality will occur quarterly for the first two years of operation at which time the Monitoring Plan will be assessed to determine if it should continue as is, be altered, or cease. The Project will need to hire an environmental specialist to ensure that measures found in the various plans presented will be effectively implemented and that results will be monitored carefully. The documentation of results on the efficiency of mitigation measures taken is critical in identifying the necessary corrective and preventive actions needed. The Bank will ensure that this commitment is met by incorporating covenants on this matter in the loan documentation.

6.3 Every worker is required by Uruguayan law to receive a health screen and obtain a health certificate, valid for two years, prior to employment. The Project will provide the health screens for all workers, including a second health screen should the construction phase last longer than two years. A first aid station will be constructed in the main office, on site near the substation and certain workers will be trained as first responders. Additionally, all workers will be provided with PPE including: uniform, high-visibility vest, safety boots, hard hat, glasses, and gloves.

6.4 **Management of Social Impacts Related to Land Acquisition and Construction:** Lease agreements, as previously mentioned, have been signed by the private land owners within the wind concession area. Negotiations are on-going with regards to the transmission line alignment. While no significant issues are expected with the consultation and negotiations between UTE and the land owners, there is a risk that the process is not controlled by the Borrower and may require time. The Borrow will be required to provide evidence of the occurrence of a public consultation process for the transmission line. The Borrower will also be required to submit signed land lease agreements for land owners affected by the transmission line.

6.5 **Management of Social Impacts During Operations:** The primary risk or impact during operations will be from noise emission from the turbines and the blinking effect during dawn and dusk to the nearby home owners. While the EIA identified these impacts as negligible, there is potential for excessive noise at three home sites once operations commence. The situation will be monitored during operations to ensure noise levels and blinking effect are not more significant than predicted. Impacted parties will have access to a Grievance Mechanism in order to voice any concerns regarding these impacts and allow for discussions with the Project to resolve any outstanding or unforeseen issues. Should noise levels be excessive mitigation measures such as creating a natural barrier or reducing turbine speeds at night will be implemented.

6.6 **Management of Impacts and Risks on Birds:** Post-construction monitoring of birds is an important tool to manage impacts. The company has developed a quarterly monitoring program that will be followed for the first two years of operation and will be continued if significant mortality is found. The monitoring of results will allow rectifying the appropriateness of the mitigations measures initially implemented. The set of mitigation measures for birds that may be implemented by the client if mortality rates are high consist in the following: (i) technical shutdown of the turbines during peak migration period and on-demand in real time if important flocks of birds are spotted; (ii) vegetation maintenance, the immediate area of the wind turbines will be regularly cleared of any vegetation so it does not attract birds; (iii) some of the blades will be painted in red and white to increase their visibility; and (iv) assessment and adjustment of the measures based on the monitoring results. These measures when applied on other wind projects have proved to be efficient. The Bank will ensure through appropriate covenants in the loan documentation and through supervision, that these are followed throughout the life of the Project.

6.7 **Management of Impacts and Risks on Bats:** The Company will also implement a post construction monitoring for the bats. Unfortunately, the effectiveness of mitigation measures for bats is not as documented as they are with birds. Based on bat fatalities that occur in North America and Europe, it is known that bats tend to fly during low wind nights i.e. when the winds are less than 6.0 meter per second. The cut in speed (which is the lowest wind speed at which the rotor blades are spinning and generating electricity for the grid) could be increased if high bat mortality is observed. An increase in the cut-in speed of the wind turbines could substantially reduce bat mortality with relatively minor losses in power generation. In wind farms in Canada, the increase of cut–in speed has reduced bat mortalities, ranging from 44% to 93% with marginal power loss (less than 1% of total annual input), similar statistics were obtained in the United States and Europe. The results of the post-construction monitoring will determine if this measure is required.

6.8 **Management of Impacts and Risks on Reptiles and Amphibians:** The protected and sensitive reptiles and amphibians potentially located within the wind concession area (none were observed during field surveys) are primarily impacted by habitat loss, fragmentation or degradation. The protection of aquatic and semi-aquatic environments through avoidance will best mitigate the impacts to these species. The project has committed to avoiding sensitive aquatic and semi aquatic environments, as well as rocky outcrops and the removal of native vegetation in order to install the turbines and construct the access roads.

6.9 **General Mitigation Measures:** In order to avoid impacts to species and habitat the Project will implement the following mitigation measures:

a) Minimize improvements (in width) to existing roads to the extent possible;

b) Minimize movements of soil to the maximum extent possible

c) Establish zones for material storage (sand, gravel, soils, equipment) in grazed pastures or previously disturbed areas and to avoid areas near water bodies and semi-aquatic environments, native woodlands and vegetation, rocky outcrops, and tall grasslands

d) Installation of generators should avoid areas near water bodies and semi-aquatic environments, native woodlands and vegetation, rocky outcrops, and tall grasslands.

VII. PUBLIC CONSULTATION

7.1 Consultation has been carried out during the Project preparation stage and was presented as a 51 MW facility with 34 generators with the potential to expand the project by 15 MW with the placement of an additional ten generators. Participants in the consultation meetings were informed that the EIA for the 51 MW facility has been submitted to DINAMA and approval had not yet been granted but was expected in April. Attendees were also informed that a second EIA for the additional ten generators (15 MW) would be submitted as soon as approval was granted for the 51 MW facility. Communities have received information about the project's objectives and scope but were not involved in the planning stages. Consultations have focused mainly on information dissemination and reaching agreements to obtain the lands and the right-of-way for the Project. Attendees were primarily concerned about when construction (and jobs) would commence, what types of jobs would be available and the anticipated duration of the construction phase. Questions were asked regarding potential noise levels and the blinking effect caused by generators once in operation. Questions concerning the certification and registration of the project were also raised.

7.2 Two public consultation meetings were held, one at the UTE vacation park, owned by UTE, in Lavalleja on Tuesday 06 March 2012 at 11:00 am and the other at the IBIS Hotel in Montevideo on Monday 15 March 2012 at 11:00 am. The number of participants was not large and many in attendance were related to the project (staff members or consultants). A detailed project description, including the technical and physical attributes of the turbines to be installed was provided. Discussions focused on the potential impacts identified in the EIA including noise, blinking effect, impacts to archaeological sites, flora and fauna. Visual simulations of the landscape with turbines were also presented. No opposition to the project was recorded during the meetings. These meetings did not occur during the EIA process; however, private consultations with the land owners affected did occur during the EIA process such that land owners could comment on the project design and siting of the turbines.

7.3 A formal Grievance Mechanism will be prepared by the Project. This mechanism will be, in form and substance, satisfactory to IDB and elaborated according to best industry practices. The Project will maintain relations with the community throughout the project cycle including maintaining a register of complaints, responding to those complaints, and reporting.

VIII. OPERATION COMPLIANCE EVALUATION

8.1 **Compliance with National Regulatory Framework:** The EIA, dated June 2011, and describing a 51 MW wind farm consisting of 34 generators, has been submitted to DINAMA but has not yet been approved; approval is expected to be granted in April 2012. An EIA for the 15 MW expansion (Libertador II and III), including the placement of ten additional generators will be submitted to DINAMA following approval of the first EIA. Permits for the wind concession area have been obtained since the EIA has not been approved. The Bank has not yet received the EIAs for the Libertador II and III expansion or the transmission line and the public consultation process for the transmission line, being handled by UTE, not the Borrower, is not yet complete. Acquisition of the transmission line right-of-way will require land lease agreements with multiple property owners.

8.2 **Classification:** Per the IDB's Environmental and Safeguards Compliance Policy, the project has been classified as a Category B operation primarily due to the scale of the wind park and the low potential for significant direct and indirect impacts on avian fauna.

8.3 **IDB Safeguard Policies and Directives Triggered:** The Project triggers the following directives of IDB's OP-703 Environmental and Safeguards Policy: B.2, Country Laws and Regulations; B.3, Screening and Classification; B.5, Environmental Assessment;

B.6., Consultation; B.7, Supervision and Compliance; and B.9 Natural habitat. The OP-102, Disclosure of Information Policy also applies for this Project

8.4 **Project's Compliance with OP-703:** Requirements of OP-703 are either being met by the Project, as defined in the EIA, or are expected to be met once the construction phase begins through the implementation of the proposed management and mitigation measures described in the EIA, and with the proper implementation of a Project EMS (Plan de Gestion Ambiental). Implementation of the Monitoring Plan once operations begin will be instrumental to obtain more data and gather a better understanding of the collision risk to birds and bats through monitoring of mortality. In case mortality is found to be problematic for specific species, corrective actions, such as temporary shut downs during peak periods of bird presence or reductions in cut-in speeds, could be implemented.

IV. REQUIREMENTS TO BE INCLUDED IN THE LEGAL AGREEMENT

9.1 The following measures will be needed to ensure satisfactory environmental and social management and compliance with IDB environmental and social policies and requirements throughout the project cycle, and will be included in the loan documents.

Prior to First Disbursement

9.2 Prior to First Disbursement of the Loan, the Borrower shall fulfill the following conditions in form and substance satisfactory to the Bank:

a. the Borrower shall, present to the satisfaction of the Bank the complete EIAs (or other relevant environmental documentation) for the wind farm, including the Libertador II and III expansions, and the related transmission line.

b. Submit to the Bank details concerning the public consultation process for the transmission line, including a Compensation Plan and signed lease agreements for all affected land owners.

c. Provide evidence of the development and implementation of the Project Grievance Mechanism.

Prior to Start of Operations

9.3 Prior to Start of Operations, the Borrower shall fulfill the following conditions in form and substance satisfactory to the Bank:

a. Submit to the Bank a detailed Monitoring Plan for birds and bats to assess and track mortality during operations. An external consultant may be required to conduct the surveying and reporting required in the Monitoring Plan.

General Requirements

9.4 The Bank (IDB) will require that the Borrower and all portions of the Project shall, at all times during the life of the loan, comply with each of the following:

a. All applicable environmental, social, health and safety, and labor requirements under the Uruguayan regulatory framework.

b. All requirements associated with any environmental, social, health and safety, and labor related permits, authorizations, or licenses that apply to the Project, the Borrower or any party responsible, including contractors, for executing the operation or its mitigation measures.

c. All aspects and components of all of the Operation's environmental, health and safety, social and labor documents.

d. Consult with IDB before approving or implementing any and all substantive changes to the Project (including its environmental and social management and mitigation plans) or its timetable which could potentially have negative environmental, social, labor, or health and safety effects.

e. Send written notice, within five days of the occurrence, of any and all noncompliance with any environmental, health and safety, social and labor requirement of the loan agreement and any significant environmental, social, labor, health and safety accident, impact, event, claim or material complaint.

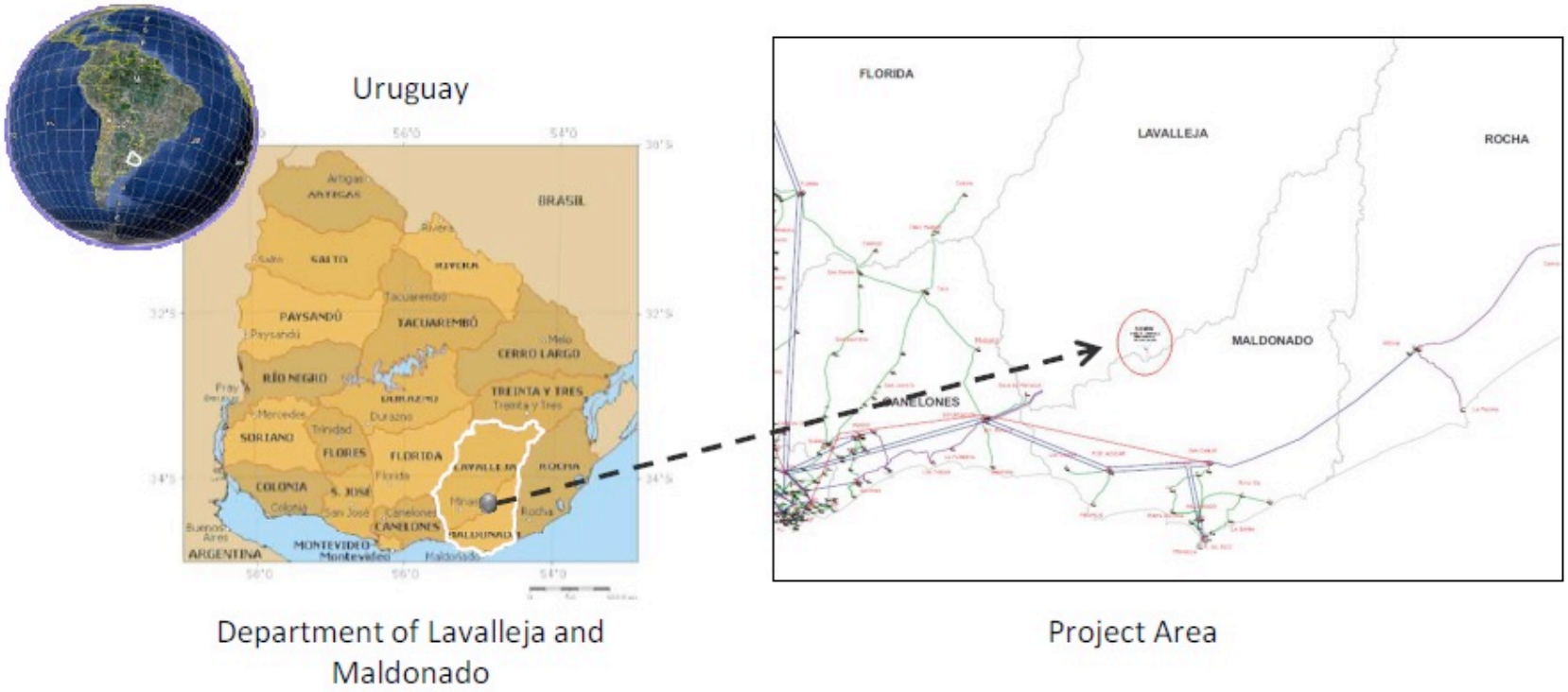
f. Ensure that all Borrower's contractors hired for construction and operation activities comply with the applicable environmental, labor, social and health and safety requirements of the loan agreement.

g. Implement ongoing information disclosure and consultation activities related to environmental, labor, social, and health and safety aspects of the Project, and, as applicable, participatory monitoring.

h. Implement an EMS that is consistent with ISO 14001.

i. The Borrower shall cooperate with IDB to facilitate monitoring and supervision site visits, inspections and audits by the Bank or representatives representing the Bank to verify compliance with environmental, social, health, safety and labor requirements and upon detection of any shortcomings and IDB's request shall develop and implement a corrective action plan to IDB's satisfaction.

Figure 2. Project Location



Department of Lavalleja and Maldonado

Project Area

Figure 3. Turbine Location

Figure 4. 63 kV Transmission Line Alignment

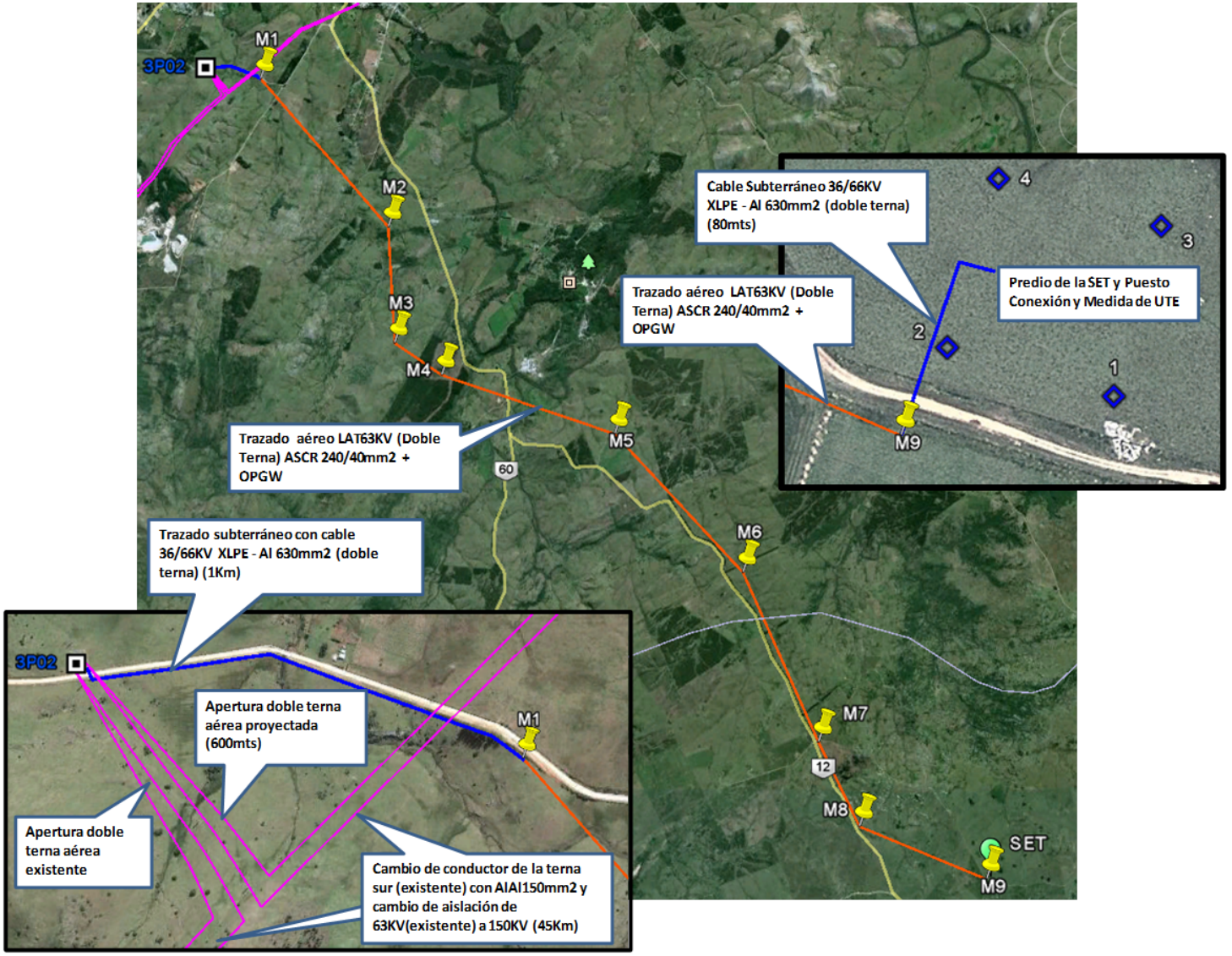


PHOTO LOG

Figure 1: Residence located in southern portion of WCA

Figure 2: Pasture land in southern portion of WCA

Figure 3: Access roads to two largest properties in WCA

Figure 4: 70 m wind tower erected on site

Figure 5: Cattle ranch within WCA

Figure 6: UTE Caracol Wind Farm