

PCHs Los Molinos SAS ESP

SECTION I: NON-CONFIDENTIAL PROJECT INFORMATION

Host Country:	Colombia
Name of Borrower:	PCHs Los Molinos SAS ESP
Project Description:	The development, construction and operation of two 19.9 MW run-of-river hydroelectric power plants, totaling 39.8 MW, financed as a single project, located approximately 95km southeast of Medellin, Colombia. The Project will add needed generation capacity and reduce electricity costs and greenhouse gas emissions.
Proposed OPIC Loan:	Up to \$50 million
Total Project Costs:	\$125 million
U.S. Sponsor:	Machinery Corporation of America, Inc. (MCA)
Foreign Sponsor:	LAREIF 1, S. de R.L.
Policy Review	
U.S. Economic Impact:	The Project is not expected to have a negative impact on the U.S. economy. There is no U.S. procurement associated with this project, and therefore there will be a neutral impact on U.S. employment. The project is expected to have a negative five-year U.S. balance of payments impact.
Developmental Effects:	This project will have a strong developmental impact on Colombia with the construction and operation of two small run-of-river hydroelectric power plants. The project will create both temporary and permanent local employment opportunities in a rural area in the host country where the unemployment rate is high, approximately 16 percent. The project company will provide community benefits through support of recreational facilities, schools, medical clinics and local charities. The completed plants will generate clean, emissions free electricity and thereby contribute to mitigating climate change impacts.
Environment:	<p>PUBLIC PROJECT SUMMARY</p> <p>Screening: The Project has been reviewed against OPIC’s policy related to dam projects and determined to be categorically eligible for further consideration. The Project is screened as Category A because potential impacts are diverse and irreversible. The major environmental and social concerns associated with the Project are related to diversion of river flow and subsequent flow reduction in 6.2 km of the San Matias River; impacts to flora and fauna; community health and safety impacts; and occupational health and safety.</p>

Applicable Standards: OPIC's environmental and social due diligence indicates that the Project will have impacts that must be managed in a manner consistent with the following Performance Standards:

PS 1: Social and Environmental Assessment and Management Systems.

PS 2: Labor and Working Conditions.

PS 3: Pollution Prevention and Abatement.

PS 4: Community Health, Safety and Security

PS 5: Land Acquisition and Involuntary Resettlement

PS 6: Biodiversity Conservation and Sustainable Natural Resource Management

PS 8: Cultural Heritage

No indigenous people were identified in the area of influence of the Project during due diligence, and reports from the Ministry of the Interior and the *Instituto Colombiano de Desarrollo Rural* (INCODER) confirm no indigenous people or ethnic minorities are affected by the Project. Significant adverse impacts on indigenous populations are not anticipated and PS 7 (Indigenous Peoples) is not triggered by the Project.

The project will be required to meet applicable provisions of the IFC General Environmental Health and Safety Guideline and IFC Environmental, Health, and Safety Guidelines for Electric Power Transmission and Distribution.

Environmental and Social Risks: The Los Molinos Project consists of the development, construction and operation of two hydroelectric plants to be located in the Municipality of Cocorna, Department of Antioquia (PCH El Molino and PCH San Matias). Each plant will have an installed capacity of 19.9 MW. The Project consists of two stages in a cascade. The first stage, PCH El Molino, diverts water from the San Matias River into an intake structure with de-sander and fore bay for the subsequent headrace tunnel arriving at the El Molino powerhouse. PCH San Matias receives water directly from the discharge channel of El Molino via a headrace tunnel to the San Matias powerhouse. The proposed project involves the construction of transmission line (3.3 km of a 110 kV transmission line), access roads (7.6 km), substation, construction offices, operation and maintenance buildings, warehouses and parking lots.

In addition to impacts and risks associated with any new construction and civil works (e.g., noise, dust, vehicle and equipment emissions, solid and hazardous waste management, and occupational health and safety) the ESIA identified that the main environmental and social impacts of the Project are: (1) diversion of river flow and subsequent flow reduction in 6.2 km of the San Matias River which could reduce the ability of the river to assimilate pollution and adversely impact biological resources in the by-passed reach; (2) impacts to local flora and fauna that are of conservation importance, including three which are endemic to northwestern Colombia: the primate *Saguinus leucopus* (Silvery-brown Tamarin), which is considered endangered by the IUCN Red List; the bird *Capito hypoleucus* (White-mantled Barbet), considered Vulnerable by the IUCN Red List; and the frog *Pristimantis penelopus* (Rana de Ingleses Negras y Amarillas), also considered Vulnerable by the IUCN Red List; and (3) potential impacts to communities (“veredas”) in the Project’s area of influence which have previously experienced forced displacement and political violence.

Occupational health and safety risks unique to this project include those associated with excavating the tunnels such as the potential for cave-ins and collapse and degraded air quality. There are also unique risks associated with mounting and tensioning of electricity cables, such as potential for contact with live wires and working at height on towers.

The Project does not require any resettlement. Land acquired for the project, including access roads, is being acquired through negotiated settlements for easement, purchase or lease. Most of these agreements have been completed and are in the process of formalization. The Project will be required to conduct any land acquisition, and mitigate any resulting impacts, in compliance with PS 5.

The ESIA identified 12 sites of archaeological importance near the Project, 10 of which may be affected by Project activities. An Archeological Rescue and Outreach Program has been developed that includes performing exploratory excavations, monitoring and supervising earth movements during construction, training of personnel and archaeological recovery.

Risk Mitigation: HMV was granted separate environmental licenses for the San Matías and El Molino projects in August

and September of 2012, respectively, by local environmental authorities (CONARE). As part of the environmental license, an ecological flow which varies depending on the month of the year, from 3.9% to 13.1% of the multiannual mean stream flow has been reviewed and approved by CONARE. OPIC will require that the Project enhance current fish baseline data and subsequently develop and implement an adaptive Ecological Flow Management and Aquatic Monitoring Plan to assure that the ecological flow is sufficient to maintain viability of the aquatic habitat in line with PS6.

Given that the Project does not entail the construction of reservoirs, and that access to the project areas will take place largely via existing roads, impacts to natural terrestrial habitats are not expected to be significant. Unavoidable impacts to forested areas, including the cutting of 8.6 hectares of mostly secondary forest, will be compensated for through the purchase and conservation of 106 contiguous hectares of forested lands in the Project's direct area of influence. This "biological corridor" will also serve to mitigate potential project-related impacts to species of local flora and fauna that are of conservation importance. In addition to creating a biological corridor, the Project will carry out both aquatic and terrestrial survey and monitoring programs to better understand the composition of the flora and fauna of the area.

Currently Los Molinos contracts a third party to manage the implementation of the EMPs and the occupational health and safety procedures for the Project. This contractor reports to the Chief Operating Officer of Los Molinos. The Company is now in the process of creating an internal management position to oversee social matters from within Los Molinos. OPIC will require that the Project submit a final organizational chart which clearly lays out roles and responsibilities with respect to environment, social, health and safety aspects of the Project. In addition, the Project will be required to establish an environmental and social management system that is consistent with the requirements of the IFC Performance Standards. OPIC will require that the Project put in place procedures consistent with international best practice to address the unique occupational health and safety risks associated with tunneling and transmission line installation.

OPIC Site Visit: OPIC staff and its environmental and social consultants undertook an environmental and social due diligence site visit from March 17 -20, 2014. Meetings were

	<p>held with the project developer, EPC, project developer’s E&S consultant (SAG), CONARE (Regional Environmental Authority), President of the Community Action Board of Vereda El Molino, President of the Community Action Board of Vereda and community members of the villages La Inmacualda, Los Mangos and San Lorenzo (communities within the project’s Area of Influence). The site visit also involved visits to the project sites including the diversion dam and San Matias conduction tunnel.</p> <p>Community Consultations: The public participation process for the Project has followed the process set out in National Regulations. As part of the public participation program of the ESIA, the Project held informational workshops in each of the villages located in the Project’s area of influence. The Project has established a community grievance mechanism; however, interviews held during the site visit with community members indicated a lack of knowledge regarding the procedures for transferring their inquiries or complaints to the Project. OPIC will require that the Project develop and submit a Stakeholder Engagement Plan that outlines current and planned stakeholder engagement and community outreach activities, including ongoing efforts to disseminate the grievance mechanism among potentially affected populations.</p> <p>The Borrower represents that the Project will hire a full time social representative to work in the project area as a community liaison. OPIC will require additional information regarding the scope of the role of the social representative and how this position is situated in the overall Project management structure.</p> <p>As a condition of its environmental license, and in accordance with national law, the Project is required to invest no less than 1% of the total project investment (excluding electromechanical equipment) in actions and works aimed at the recovery, preservation, and conservation of the San Matías River basin. In order to determine the best use of these resources and to ensure that the benefits truly accrue to local populations, Los Molinos is conducting regular meetings with representative community members to discuss and choose options in a bottom-up manner.</p>
Workers Rights:	<p>OPIC’s statutorily required standard worker rights language will be supplemented with provisions concerning the rights of association, organization and collective bargaining, timely</p>

	<p>payment of wages, hours of work, minimum age, and hazardous working conditions. Standard and supplemental contract language will be applied to all workers of the Project. The Project will be required to operate in a manner consistent with the International Finance Corporation's Performance Standard 2 on Labor and Working Conditions.</p> <p>As part of the Lenders' joint Environmental and Social Action Plan, OPIC will require the Project to submit revised human resources policies, a formalized grievance mechanism, a monitoring program for subcontractors' compliance with labor requirements and a security management plan satisfactory to OPIC and in full alignment with the IFC Performance Standards.</p>
Human Rights:	OPIC issued a human rights clearance for this project on December 31, 2013.