Environmental and Labor Issues:

Project Background: The project is a 5-megawatt run-of-the-river hydroelectric project, which includes various installations along a 4.7-kilometer stretch of the Upá River. Its primary installations include an intake dam at 620 meters above sea level (MASL), a 1.7-kilometer diversion tunnel leading to a reservoir at 619 MASL (approximately 10,000 m3 volume), and a power house at 352 MASL, connected to the reservoir via a buried penstock pipeline. Next to the power house will be a transformer connecting to a 3.5-kilometer-long transmission line, which will terminate at the closest grid tie-in location in the village of El Jobo. The project will upgrade the existing road from El Jobo to the village of La Perla for site access. The project will also include the construction of the following new access roads: a 1.8-kilometer road from km 8 of the El Jobo-La Perla road down to the dam site; a 3.5-kilometer road running from the intake dam to the reservoir; a 0.5-kilometer access road from km 3.5 of the El Jobo-La Perla road to the power house; and a temporary access road from the reservoir to the power house during the construction phase, for purposes of installing the penstock (current plans are to decommission this road during operations).

Environmental Classification: This is a category III project according to the IIC's environmental and labor review procedure because it could produce certain effects that may be avoided or mitigated by following generally recognized performance standards, guidelines, or design criteria. The main environmental and labor considerations related to the project are: (1) compliance with local legislation, environmental management plans; (2) sustainable natural resource management; (3) water resource management; (4) air emissions, wastewater and solid waste management; (5) labor and working conditions; and (6) social issues, including community health and safety.

Environmental Management Plans: IHSA prepared an environmental management plan (EMP) for the project, which was reviewed and approved by the Ministry of the Environment and Natural Resources (MARENA). The EMP includes basic information about the project, the local context, and potential impacts, and then briefly outlines a series of datasheets for specific action plans to be developed with a view to minimizing the impacts specified in the EMP. An annual operating plan (AOP) must be submitted for approval prior to the initiation of construction and include annual projects with regard to the construction and operation phases. Based on these commitments, the municipality requires the project to submit an AOP, consisting of matrices outlining implementation arrangements, responsibilities, timing, and budget for each management and monitoring measure, with adjustments as needed thereafter, based on project advancement. Drafting of the project's first AOP is currently under way.

As part of the Environmental and Social Action Plan (ESAP) agreed to with the IIC, the company will also: (a) improve the socio-economic baseline information; (b) conduct additional surveys of flora and fauna, including aquatic fauna; and (c) conduct a more detailed review of the current uses of the river's natural resources by local residents, including those downstream of the river. In addition, per the agreed ESAP, the company will: (a) document all land acquisition and resettlement policies and procedures being followed; (b) develop a community risk-management, communications, and emergency response plan; (c) develop a plan for ongoing stakeholder engagement, disclosure, and response to grievances, to be implemented throughout the life of the project, and ensure that the grievance mechanism is effectively communicated to all stakeholders; and (d) develop a human resources policy, and a comprehensive occupational, health and safety plan, including requirements and expectations as well as training, monitoring, and incident reporting.

Natural Resource Management: The project will be located in an area consisting primarily of land cleared for cattle grazing and agriculture. However, areas of secondary-growth forest also exist within the project's area of influence. Evaluations of the project area indicate a relatively limited impact on vegetation, particularly as it is a run-of-the-river project that does not necessitate the

building of a reservoir (which typically involves clearing a greater area). Based on information reviewed and field observations, the project area appears to contain no critical natural habitats. In addition, no ecosystem services provided by the river were identified. However, at the request of the IIC, the company will conduct further investigations and field surveys to strengthen the biological baseline of the project area of influence (i.e., to characterize in more detail the aquatic flora and fauna and potential uses of the river).

As part of the sustainable management of the natural resources of the area, the company will contribute to improve watershed management by developing and helping to implement a sub-basin management plan for the area upstream of the project along the Upá River. The three main components of the plan are (1) environmental education; (2) sustainable natural resource use (including eliminating unsustainable forestry practices and reducing pesticide use); and (3) reforestation. Due to municipal interest in strengthening overall watershed management, one of the conditions of the environmental permit issued by MARENA is the development and implementation of a sub-basin management plan. Effective watershed management to reduce erosion and increase forest cover and biodiversity will also benefit the project in the long run, by guaranteeing the health of the river and minimizing reservoir sedimentation issues.

Water Resource Management: Based on the hydrological flow study conducted, the estimated flow of the Upá River is 2.1 m3 per second and the minimum ecological flow is approximately 9 percent of that flow value. As the baseline assessment of hydrological resources and aquatic ecology was primarily based on interviews with the local community, the IIC has requested that the company conduct additional surveys regarding aquatic flora and fauna, as well as to conduct a more detailed investigation of the uses of the river, in order to ensure that the minimum ecological flow value selected is adequate to avoid potential impacts on the local population and river ecology.

Air Emissions: The project will have minimal air emissions, as it is a renewable energy project that will indirectly result in the reduction of greenhouse gases. The company will ensure that trucks are well maintained to minimize engine emissions and ensure safe operation on the roadways. In addition, the trucks used to transport excavated materials will be covered during transport to reduce fugitive dust emissions.

Wastewater/Water Quality: Soil erosion and runoff into local waterways due to vegetation removal and earthmoving will be minimized using silt screens and other standard methods; disturbed areas will also be replanted with native vegetation as soon as possible. In addition, contractors will be barred from dumping excavated soil and rock into streams and other waterways or within riparian areas. During the operational phase, the company will ensure that sanitary wastewater is discharged into a properly designed septic system.

Solid Waste Management: The operational phase of the plant will not generate significant amounts of waste, other than domestic waste that will be disposed of in licensed facilities. Nonhazardous solid waste from the construction phase (such as wood, metal, and food scraps) will be separated for recycling or disposed of appropriately in compliance with applicable regulations. If existing third-party facilities are used for waste disposal during construction, the company will ensure that waste handlers possess the necessary legal certifications; and if the company determines that a landfill will be constructed for waste disposal, its location and design, as well as construction and operations management procedures, shall be submitted to the IIC for review to ensure compliance with its environmental requirements. IHSA will also ensure that hazardous materials, such as fuel, lubricants and paint, are stored in containers in order to prevent accidental release into soil and/or groundwater. Portable fuel storage tanks used during construction will have secondary containment systems, and workers will be trained in how to respond to accidental fuel, lubricating oil, or hydraulic oil leaks.

Community Health, Safety, and Security: IHSA will implement a series of measures to minimize risks to the health and safety of the community—principally related to traffic and pedestrian safety—from the transport of construction materials and equipment to and from the construction site along the transport routes. Transport equipment operators will be required to adhere to a company-sponsored driver safety program in order to ensure compliance with speed limits. Local communities will be notified of potential traffic safety risks, and residents along transport routes will be given a point of contact to relay any concerns or grievances. A management program for traffic and road safety will be developed and tailored to take into account current road use patterns so as to minimize impacts and safety risks to residents.

The company has developed an emergency response plan, which will be upgraded as per the ESAP agreed to with the IIC. The plan to be developed will be a community risk-management, communications and emergency response plan in the event that community members are put at risk by a project-related emergency. It will include plans for communication with the public in the event of an emergency; procedures and plans for the provision of medical attention, if required; and coordination with local public officials to respond to accidents or incidents affecting local communities. To the extent possible, the intake diversion structure will be protected from public access with warning signs and fencing, so as to discourage and prevent unauthorized access.

Social Issues: The company has actively engaged the local community and its representatives since the initial project design phase. It has held meetings to discuss the project with various stakeholders from the project area of influence, including landowners, members of the community and the municipal government.

The company is appropriately implementing measures to minimize the amount of land to be acquired for the project so as to avoid directly affecting existing land uses wherever possible. Small adjustments to the locations and alignments of project components are being made to reduce the number of landowners affected. Nevertheless, ten households in El Jinete, located within the right-of-way of the penstock, will need to be relocated to enable its construction. In addition, a number of fences around grazing lands, as well as some agricultural activities, will be affected by project infrastructure. To date, the company’s handling of land acquisition, resettlement, and compensation activities appears to be generally consistent with international best practices on resettlement (such as those used by the International Finance Corporation). Affected parties have been clearly identified and communication with local residents is considered good. Clear information on the needs and process for land acquisition by the company, as well compensation options and timeliness is being provided to all affected parties in writing and verbally. The company is offering to acquire entire parcels when the majority of land therein would be affected and/or the loss of the affected area would make the land parcel economically unviable. In addition, IHSA will rebuild homes for the directly displaced households at the location of their choosing (within their remaining property), with all new materials to be provided by the company. The company is providing the same level of assistance in rebuilding displaced dwellings and compensating for lost assets and land improvements to all affected households, regardless of land title status. Some residents that would be displaced do not currently hold formal title to their land, although all residents in this position have reportedly been on their land for many years and thus have “customary rights” to the land under Nicaraguan law. For these individuals, IHSA is assisting them in obtaining and formalizing their land claims as part of the acquisition and relocation process. In addition, families in the project area of influence will also directly benefit from the project’s improvement of existing rural roads.

Currently, roads are in poor condition and reportedly become impassable during portions of the rainy season. The upgraded roads will greatly facilitate residents’ connectivity with markets, health care facilities, secondary schools, and other amenities in El Jobo and beyond. Nevertheless, as per the ESAP agreed to with the IIC, the company will further improve the documentation of all land

acquisition and resettlement policies and procedures being followed, including land and asset valuation methods, consultation and negotiation processes and timelines, and the specifics of compensation agreements reached with each affected party. IHSA will also define plans for ongoing monitoring and evaluation as well as respond to any compensation or resettlement-related grievances.

Occupational Health and Safety: As per the ESAP agreed to with the IIC, IHSA will develop a comprehensive occupational health and safety plan, including requirements and expectations as well as provisions for training, monitoring, and incident reporting. The company will require that subcontractors follow said plan. They will also require that contractors train their employees in identifying and preventing workplace risks, including the use of personal protective equipment, handling of hazardous materials, and emergency response. IHSA will routinely monitor construction activities to ensure compliance with its health and safety requirements.

Labor Issues: IHSA will develop a human resources policy, which will specify the rights and responsibilities of all project staff and contractors, in keeping with Nicaraguan labor laws. In addition, the policy should recognize IHSA employees' freedom of association, prohibit discrimination against employees or potential employees, and prevent any hiring of persons under the age of 18 (for activities considered to be of higher risk). IHSA will also implement subcontractor oversight procedures in order to ensure that their workers have the same above-mentioned rights as IHSA employees.

Monitoring and Annual Reporting: IHSA will ensure that the management plans included in the AOPs are tailored to the specifics of the project. Apart from the management measures included in the existing Environmental Management Plan, the following additional management measures will be introduced and monitored: stakeholder engagement; ongoing disclosure and grievance response plan; resettlement action plan; community risk management; communications and emergency response plan; biodiversity management plan; cultural heritage chance finds program; local employment plan; and training and capacity building programs for staff and contractors as needed to implement the plans in the AOP. The company will submit an annual report to the IIC summarizing the monitoring data related to the implementation of its ESAP agreed to with the IIC.