

CHAPTER 1 INTRODUCTION

This document contains the Environmental Impact Assessment (EIA) of the Alto Maipo Hydroelectric Project (hereinafter PHAM), owned by AES Gener S.A. Company.

The PHAM entails the construction and operation of two run-of-river plants in hydraulic series to complete an installed power of 531 MW. The plants will use the waters of the high water shed of the Maipo River as well as the waters of the middle and lower course of the Colorado River, in the San José de Maipo Municipality, Metropolitan Region of Santiago.

The first plant, Alfalfal II, will be placed at the southern section of the Colorado River, downstream the present Alfalfal I plant, and will use the waters of the upper basin of the Volcán River, as well as the flows at present released by the El Yeso reservoir to the river of the same name.

The second plant, Las Lajas, will be placed at the southern bank of the Colorado River at the El Sauce sector, and will use the waters coming from the discharge of the Alfalfal I and II plants, besides the flows of the intermediate water shed of the Colorado River.

Most of the PHAM works will be underground, including the machine rooms, siphons and headraces, these made up of long tunnels. Surface civil Works correspond to intakes, conduction Canals and new bridges over the Colorado and Yeso Rivers. Service roads, excess excavation material dumping points and temporary camps are also contemplated. All these works and permanent and temporary facilities have been included in the environmental assessment.

The generated power will be delivered to the Central Interconnected Grid (SIC) by means of an electric transmission system which is not part of this EIA.

The implementation of the PHAM responds to the need to supply the progressively increasing energy demand, thus contributing to lessen Chile's dependency from traditional fuels used for thermal power generation, part of those coming from other countries. In short, the PHAM will displace the operation of new thermal plants. In this sense, given the nature of the Project, the Owner has considered the implementation of the Alto Maipo Hydroelectric Project (PHAM) under the Clean Development Mechanism (CDM) as stated in Article 12 of the Kyoto Protocol, in order to overcome technological barriers associated to its development. Therefore, with the potential income received from the sale of carbon bonuses, derived from the implementation of the PHAM by the Clean Development Mechanism (CDM), it is aimed to collaborate economically to the removal of technological barriers necessary for the execution of the Project.