



EFFICIENCY OF HYDROELECTRICITY POWER IN CAMEROON

A. S. Arrey

Foundation for Energy and Research Evaluation (CIG)
Great Soppo str. 2, Buea – Cameroon

ABSTRACT

Hydromine initiated a major bauxite mining/alumina refinery project in the Republic of Cameroon, in participation with Dubai Aluminum and Hindalco Industries, Ltd. of India, which will mine 8 to 9 million tons of bauxite annually that will be converted into alumina at a 3 million ton per year alumina refinery, the size of which could be expanded in the event of increased demand. The project is being carried out by a joint venture company, Cameroon Alumina Limited ("CAL"). At the request of the Cameroon Government, to add more value to this project, Hydromine also took on the responsibility to develop two hydroelectric facilities. At the request of the Cameroon Government, to add more value in Cameroon by converting alumina into aluminium through the utilization of Cameroon's vast hydroelectric resources (an estimated 60,000 MW), Hydromine has identified two high potential hydroelectric power generation sites for development in Cameroon. These are the Mouséré (Mbakaou/Pont Rail) and Grand Eweng hydroelectric sites. Initial studies to date conclude that both projects would provide low cost energy on a highly efficient basis (between 75-85% guaranteed annual output to rated capacity). Since 50 % is considered a very good benchmark in the industry, the efficiency of these projects is phenomenal. The Mouséré facility would have a minimum rated capacity of 350 MW and a guaranteed annual capacity of at least 290 MW. The Grand Eweng hydro facility appears to have a minimum rated capacity of 1200 MW and a guaranteed annual capacity of about 1000 MW or about a ratio of guaranteed annual power to rated power in excess of 83 %.

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