

The Feasibility of Financing the Gotvand Reregulating Dam's Hydropower Scheme through BOT Means

Linachasebi

Email:linachasebi@yahoo.com

Address:Khuzestan Water And Power Authority
Golestan Road , Ahwaz _ p.o Box 61235-137,
Tel:0098-611-3339755 Fax:0098-611-3366421

Hamid Reza Khodabakhshi

Email:khhamid@yahoo.com

Address:Khuzestan Water And Power Authority
Golestan Road , Ahwaz _ p.o Box 61235-137,
Tel:0098-611-3339755 Fax:0098-611-3366421

Abstract:

A historical review of the changes in the power industry shows that although this industry was founded on the basis of private sectoring, over the years the incentive for investment declined.

One of the first instances was the installing of a 500kv turbine/generator on the Gargar tributary of the Karun river in the city of Shushtar and the harnessing of hydropower. Since this area is of great historical importance in the Khuzistan region , the constructing of such a power station is of great importance, especially since it shows that the funding of a project through public cooperation existed primarily among the Iranians 70 years ago.

The central government, dependent on the large oil revenues obtained, increased demand for electric power, thus forcing the government to create governmental power utilities. Due to the lack of facilities and the existing limitations , little privatization took place in this area and gradually the private sector in the power industry dwindled and ultimately died out.

With due consideration to the 7% a annual demand for power in Iran, the overall generation capacity of the country's hydropower plants will have to increase to twice its current capacity within the next 10 years. Taking the fluctuations in the oil market into account the Iranian government can no longer provide financial support for such projects which are based on the costs for power generation being subsidized by the government itself, therefore utilizing local and foreign finance for the development of power plants seems to be the most optimal solution. The BOT Method or better known as the Building. Operating and Transfer method seems to be one of the most attractive options for the inducing of the private sector to cooperate in ground laying projects, especially those related to the power sector. This method is the most common method

used world wide for the providing of the necessary funding for hydropower schemes, since it provides the project with more liquid assets, thus expediting the project implementation

Due to the vast potential of water in the khuzistan region, the majority of hydropower plants in the country are to be found in this province. The Gotvand reregulating dam is located 30km upstream of Shushtar and was built in 1976. The construction of Gotvand Oliyah Dam and Hydropower station upstream of the reregulating dam, and the necessity of operation its PowerStation during peak generation periods, and subsequently the controlling and regulation Of the reregulating dam's reservoir are the basis of the current study being carried out for the increase in dam height.

Based on the studies carried out, it is also possible to construct a 90MW PowerStation on the condition that the dam height increases. This power station would be capable of producing 337.7 GW/h annually. Since the dam structure is already in place , the costs for the construction of the power house would be marginal and its duration minimal. The financial feasibility indices also show that it would be highly feasible to finance the Gotvand reregulating dam's hydropower plant through BOT means.

Data Sheet of First Athuor:

Lina chasebi is a BA in Economics from Shiraz University who is currently working as an Economic Specialist for the Dams and Hydroelectric Power Plants Division of The Khuzistan Water and Power Authority .She is also author of an article on "The Feasibility of Financing Hydropower Schems Through BOT Means."presented at the National Conference on Hydrelectric power plants in June 2003.