

# KAYRAKTEPE

Turkey



Damsite

## DESCRIPTION

The Kayraktepe project is to build a 196m-high rockfill dam on the lowermost reaches of the Goksu River, which flows into the Mediterranean Sea in western Turkey, and to provide 420MW of power generation. Since the project site is abundant in limestone, special care should be taken to keep the reservoir watertight.



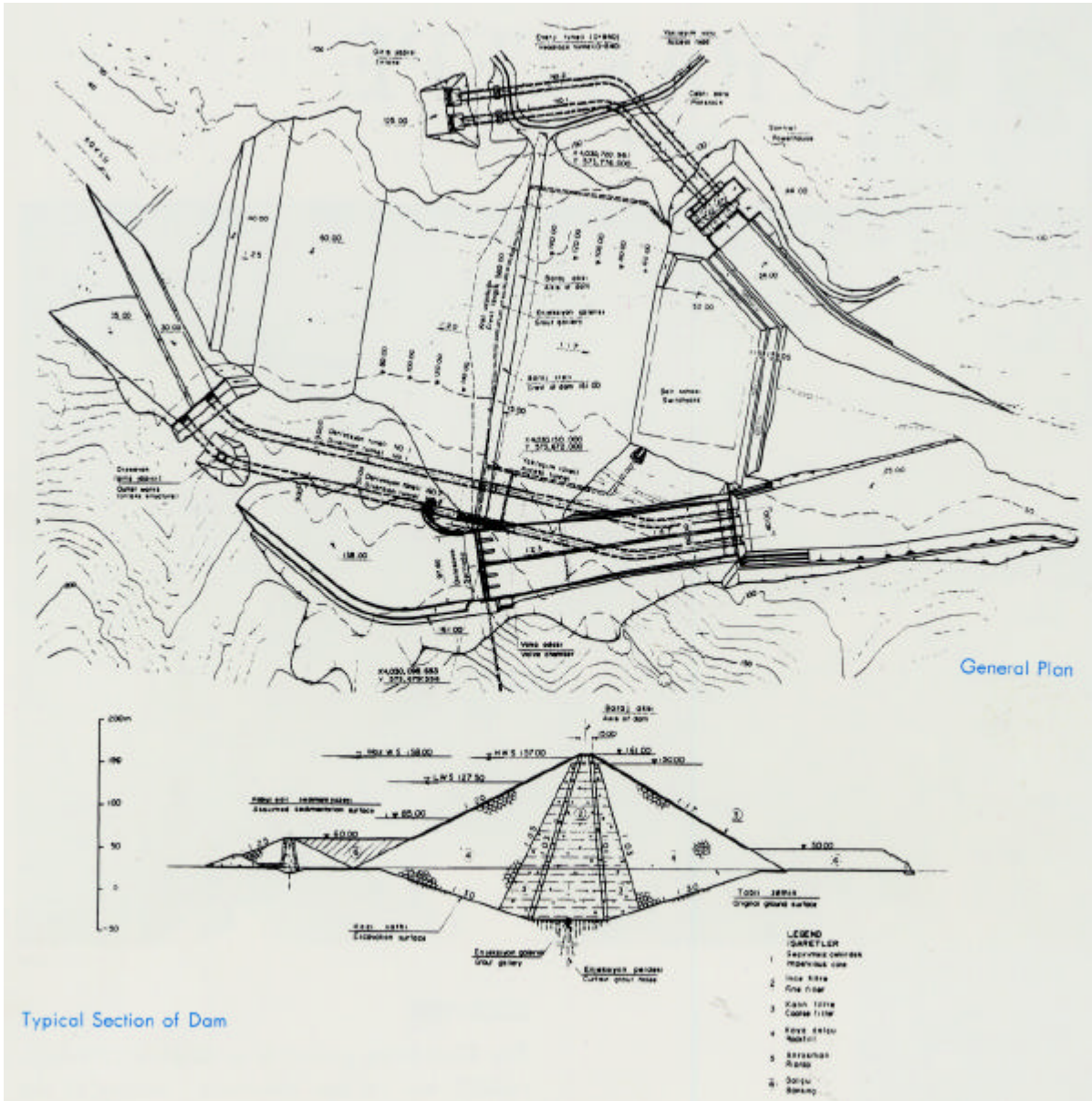
## NAME OF CLIENT:

General Directorate of Electrical Power Resources  
Survey and Development Administration (EIE)  
General Directorate of State Hydraulic Works (DSI)

## CAPACITY: 420 MW

## SERVICES:

Feasibility Study (March, 1980 - November, 1981)  
Detailed Design (November, 1981-December, 1983)  
Construction Supervision (August, 1986-December, 1994)



### Principal Characteristics of Project

<b>Catchment Area</b>		10,069km <sup>2</sup>
<b>Reservoir</b>	Total Storage Capacity	4,800x10 <sup>6</sup> m <sup>3</sup>
	Effective Storage Capacity	2,960x10 <sup>6</sup> m <sup>3</sup>
	Available Depth	29.50m
<b>Dam</b>	Type	Rockfill
	Height x Crest Length	196.0m x 580.0m
	Total Volume	17.0x10 <sup>6</sup> m <sup>3</sup>
<b>Spillway</b>	Type	Gated Chuted Spilway
	Capacity	9,875m <sup>3</sup> /sec
<b>Waterway</b>	Type	Tunnel
	Size	D8.0xL170.0x2 lines
<b>Penstock</b>	Type	Embedded Steel Penstock
	Length	No.1 288.1m ~ No.2 256.67m
	Diameter	7.2m ~ 5.2m(main), 2.0m ~ 1.7m(sub)
<b>Powerhouse</b>	Type	Semi-Underground Type
<b>Turbine</b>	Type	Vertical Shaft Francis Turbine
	Output x No. of Unit	205MWx2, 22.6MWx1
<b>Generator</b>	Type	3-Phase Alternating Current Synchronous Generator
	Output x No. of Unit	223MVAx2, 24.3MVAx1

Kayraktepe

