

<b>PROJECT TITLE</b>	Atherinolakkos Thermal Power Plant
<b>LOCATION</b>	Crete, Greece
<b>CLIENT</b>	Contractors Joint Venture PARNON-TEB

**DESCRIPTION***Main breakwater*

The project entails the preparation of the master plan, the development of the access zones, the marine works and the flood protection measures for the development of Atherinolakkos Power Plant by PPC S.A. (Public Power Corporation S.A.) in Crete. More specifically, the project comprises:

**A) Marine works for the unloading of 20,000 DWT supply tankers of the power plant, consisting of:**

- Construction of the 380 m long main breakwater armoured with accropodes
- Construction of the 270 m long and 12 m deep gravity quaywall at the lee side of the main breakwater. The 190 m were built with caissons which were constructed in Patras (some 350 nm from the project site) and towed to the project site.
- General excavation of the port basin (250,000 m<sup>3</sup>) using explosives.
- Armouring of the 900 m long embankments along the south end of the plant area against wave attack, comprised of accropodes and quarry rock.
- Construction of a fishing port to be used by the local fishermen. The port comprises a 190 m long main breakwater armoured with accropodes and 180 m long quay walls

*Fishing harbour*



General view of the Atherinolakkos Thermal Power Plant



Southern coast of the Power Plant



Atherinolakkos Power Plant aerial view

### B) Land zone infrastructure for the future installation of the power plant comprising:

- Land excavation of rock m (1,200,000 m<sup>3</sup>) and land reclamation for the development of the land zone where the power station shall be built
- Stream diversion works for the flood prevention of the power plant zone
- Hot water outfall channel and outfall protection works
- 7 km long road works

The services of ADK acting as the Technical Consultant to the contractor for the above works comprised:

- Preliminary design and technical support during the tender period including wave modelling studies for the determination of the design wave characteristics and the setting out of the external port works
- Following contract award, the detailed design of all the above works including geotechnical investigation and topographic and bathymetric surveys.