



Duyen Hai 3 Thermal Power Plant Project, Vietnam



PROJECT SUMMARY

PROJECT NAME: Duyen Hai 3 Extension Thermal Power Plant Project

PROJECT DATE: March 2019 – April 2020

CLIENT: Power Generation Corporation 1 (EVNGenco1)

CONTRACTOR : Sumitomo Corporation
SUB-CONTRACTOR: Mitsui E&S Engineering Co. Ltd

CONSULTANT: Power Engineering Consulting Joint Stock Company 2

INSTRUMENTATION SPECIALIST: Geo Science Co. Ltd



OVERVIEW

Duyen Hai 3 is one of four coal-fired power plant projects developed at Duyen Hai Power Centre. They have a combined generation capacity of 4,348MW, as outlined in the nation's power development master plan between 2011 and 2020 with a vision towards 2030. Duyen Hai 3 thermal power plant extension utilises a supercritical steam turbine and pulverised coal-fired boiler for generating thermal energy and a selective catalytic reduction system for the reduction of nitrogen oxides emissions.

The centre occupies a total area of 879 hectares in Tra Vinh province, a coastal area with a total investment capital of \$986.95 million.

The Coal storage yard which needs to be monitored for settlement has an area of approximately 120m x 260m.

MONITORING

The project involved the following challenges:

- Temperature & barometric pressure between day and night varies greatly
- The temperature inside the coal layer can reach over 70 degrees during the day.
- The coal storage facility operates 24 hours a day and 7 days a week and no personnel or equipment can access the site to take measurements.

Vibrating Wire Liquid Settlement sensors were placed below the coal layer prior to loading of the facility. They were then connected by cables/tubing to the Reservoir & Data Loggers, which had to be located completely outside the facility to allow engineers to set up and monitor readings without entering the storage area.

The Geosense Liquid Settlement System is performing excellently and has provided a suitable solution to meet the requirements of the site and client.

PRODUCTS USED

VWLS-200 Settlement Sensors
18 Liquid Settlement Sensors & 2 Reservoirs to monitor ground settlement.

GeoLogger GR series
Automatic data logger