

HYDRO POWER STATION SOUTHERN CALIFORNIA EDISON MACHINING

Goltens was requested to perform critical in-situ machining on one of Southern California Edison's hydro power stations in California. In response to this, Goltens mobilized one of its 4 meter flange facing machines and laser alignment equipment to the power station located on the Kern River in California.

The required machining job was comprised of 4 different parallel foundation surfaces that had become misaligned due to movement in the earth over the lifetime of the plant. The Kern River power station was built in 1921 and the work undertaken was part of an effort to make the power station more efficient as part of Edison's continued focus on providing green energy to its consumers.

Goltens handled the local mobilization and logistics for all of the tools and related equipment necessary for the job and mobilized leading in-situ technicians to the yard, located about 200 KM north of Los Angeles to execute the job.

REPAIRS CONSISTED OF:

- Inspection of existing condition via laser check
- Alignment of 4 meter flange facing tool to meet the tolerances required (0.09mm over 2,800mm dia.)
- Machining of 4 foundation surfaces ensuring correct alignment to earth and to each other

RESULTS:

Goltens technicians completed this complex job in close association with Edison relative to the tolerance of the 4 different surface's requirements in only 21 days including mobilization and demobilization of equipment and personnel.

PROJECT FACTS:

Foundation diameter: Number of surfaces: Alignment:

Tolerance on surfaces: Hydraulic Power turbine:

2800 mm

Towards "earth" using FARO laser tracker

0.09 mm at diameter of 2800mm





