



## Power Combined Cycle

**Client**  
Pinnacle West Energy

**Location**  
Apex, Nevada, USA

## Silverhawk Project

CH2M HILL was the Engineering, Procurement and Construction (EPC) contractor for this 570MW combined cycle power project located approximately 22 miles north of Las Vegas, Nevada. CH2M HILL and the Owner, Pinnacle West Energy, worked as a team to achieve a high quality, best value project, including the use of flexible contracting options and incentives.

### Value Added

Pinnacle West Energy selected CH2M HILL for this Project based on:

- An integrated Engineering, Procurement, Construction and Startup approach and a Team with significant combined cycle plant design, construction and commissioning experience.
- Our execution plan and proven ability to meet schedule.
- Our labor management expertise that provided the assurance of a quality workforce with predictable cost, productivity, and experience.

As the second consecutive EPC Power Plant CH2M HILL has successfully completed for Pinnacle West Energy, Silverhawk demonstrates the value of our Outcomes by Design process - working with, not just for our Clients.

### Project Specifics

The Facility is equipped with two Siemens Westinghouse 501F combustion turbine generators (CTG's), two triple pressure reheat Alstom Heat Recovery Steam Generators (HRSG's), each equipped with supplemental duct firing, one GE D-11 condensing Steam Turbine Generator (STG), one 40 cell air-cooled condenser (ACC) and a Zero Liquid Discharge facility.

CH2M HILL was responsible for engineering, procurement and delivery of all BOP equipment, construction, startup, testing, and initial operation of the facility. In addition we were responsible for programming the plant control system, operator training, and we shared in the responsibility for permitting of the plant with Pinnacle West Energy.

The Project was completed on May 1, 2004 – one month ahead of the original schedule completion date. The Project was also under budget.

The Project won CH2M HILL Lockwood Greene's 2003 President's Safety Award and completed in excess of 1.1 million manhours without a lost time accident.

Power Engineering Magazine selected the Silverhawk Project as the 2004 Plant of the Year.

The plant is now owned by Nevada Power.