

# Silverhawk Generating Station



**Location:** 30 miles North of Las Vegas, Nevada

**Peak Generating Capacity:** 520 Megawatts (Summer Peak)

**Plant Description:** The Silverhawk Generating Station is a clean-burning natural gas-fueled power plant that is located in Southern Nevada north of Las Vegas. The plant went into service and utilizes two highly efficient Siemens / Westinghouse 501FD2 combustion turbines to produce electricity. Additionally, the exhaust from the two turbines is recycled to produce steam for a General Electric D-11 steam turbine to make additional electricity for NV Energy customers.

The plant went into service in 2004.

Unlike conventional power plants that use substantial amounts of water for cooling, the Silverhawk Station uses a six-story-high dry cooling system. Similar to a car radiator, 40 massive fans are used to condense the steam back into water to be reused in the plant. Remarkably, each fan is approximately 34 feet in diameter.

The Silverhawk Generating Station is part of a 2,250-megawatt three-plant complex, which includes the Harry Allen and Chuck Lenzie Generating Stations.

**Employment:** Approximately 10 operational, 6 maintenance and a small number of leadership, engineering, safety and administration employees are shared across the tri-plant complex.

## Interesting Features:

- The plant can produce enough electricity to serve approximately 315,000 Nevada households.
- The dry-cooling system enables the combined-cycle plant to make the same amount of electricity with a mere 7 percent of water used by conventional water-cooled facilities. And, for the water used, the facility uses a unique brine concentrator system that recaptures and recycles about 90 percent of the water used.
- When the plant was completed, it was heralded as the national "Project of the Year" by Power Engineering Magazine in 2004.
- NV Energy annually provides approximately \$32 million in tax revenue to Clark County that benefits general county operations, schools, libraries, and other civic activities.

# Generating Resources

