



Silverhawk Generating Station



Location: 30 miles North of Las Vegas, Nevada

Peak Generating Capacity: 520 Megawatts

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 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. It is jointly owned with Southern Nevada Water Authority, but NV Energy is the operator and major owner (75 percent).

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.

Employment: Approximately 25 employees

Interesting Features:

- The plant can produce enough electricity to serve approximately 315,000 Nevada households.
- To further reduce water usage, the Silverhawk station uses a unique brine concentrator system that recaptures and recycles about 75 percent of the used water.
- 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 \$34 million in tax revenue to Clark County that benefits general county operations, schools, libraries, and other civic activities.



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