

Harry Allen Generating Station



Location: 30 miles north of Las Vegas, Nevada

Generating Capacity: 628 Megawatts (Summer Peak)

Plant Description: The Harry Allen Generating Station is a clean-burning natural gas-fueled power plant that is located in Southern Nevada, north of Las Vegas. It was originally built as a “simple cycle” plant to operate mostly during the hottest time of the year when customer demand was the highest. Later a combined-cycle facility was added to expand its ability to serve customers and to help NV Energy become more energy independent in Nevada.

The original 72-megawatt General Electric 7EA combustion turbine was completed in 1995. The second similar-sized unit was added in 2006, and it includes a DLN1+ dry low-NOx combustion system.

In 2011, the station added a 484-megawatt combined-cycle system that includes two highly efficient General Electric 7FA+e combustion turbines and a recycled exhaust system to produce steam for a General Electric D11 steam turbine to make additional electricity.

Unlike conventional power plants that use substantial amounts of water for cooling, the combined cycle units at the Harry Allen Generating Station use a six-story-high dry cooling system. Similar to a car radiator, 36 massive fans (36-feet in diameter) will be used to condense the steam back into water to be reused in the plant.

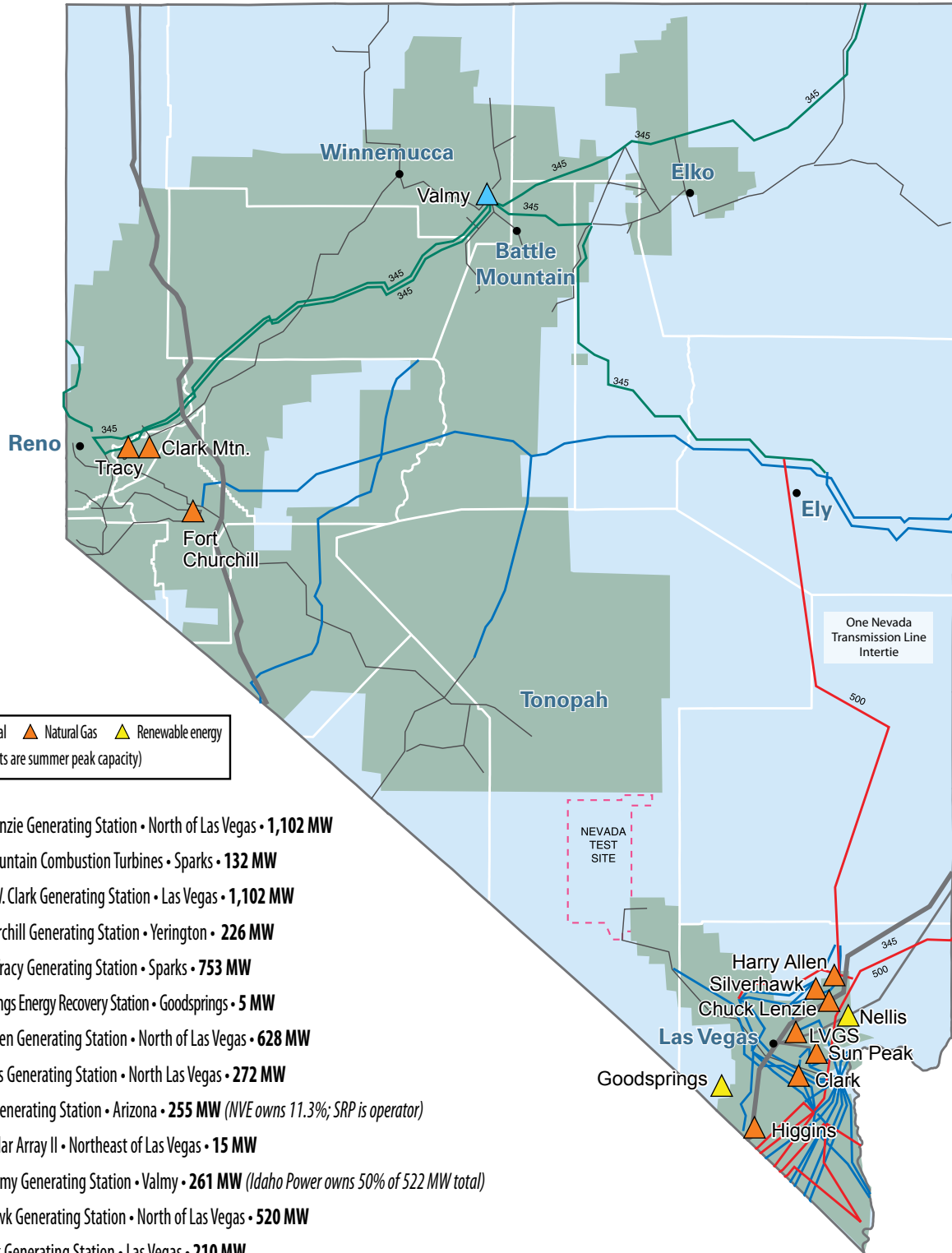
The Harry Allen Generating Station is part of a 2,250-megawatt three-plant complex, which includes the Chuck Lenzie and Silverhawk Generating Stations.

Employment: Approximately 10 operational, 42 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 375,000 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 waste water treatment system that recaptures and recycles about 75 percent of the water used in the power production process.
- 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



Key: ▲ Coal ▲ Natural Gas ▲ Renewable energy
 (All megawatts are summer peak capacity)

- ▲ Chuck Lenzie Generating Station • North of Las Vegas • **1,102 MW**
- ▲ Clark Mountain Combustion Turbines • Sparks • **132 MW**
- ▲ Edward W. Clark Generating Station • Las Vegas • **1,102 MW**
- ▲ Fort Churchill Generating Station • Yerington • **226 MW**
- ▲ Frank A. Tracy Generating Station • Sparks • **753 MW**
- ▲ Goodsprings Energy Recovery Station • Goodsprings • **5 MW**
- ▲ Harry Allen Generating Station • North of Las Vegas • **628 MW**
- ▲ Las Vegas Generating Station • North Las Vegas • **272 MW**
- ▲ Navajo Generating Station • Arizona • **255 MW** (*NVE owns 11.3%; SRP is operator*)
- ▲ Nellis Solar Array II • Northeast of Las Vegas • **15 MW**
- ▲ North Valmy Generating Station • Valmy • **261 MW** (*Idaho Power owns 50% of 522 MW total*)
- ▲ Silverhawk Generating Station • North of Las Vegas • **520 MW**
- ▲ Sun Peak Generating Station • Las Vegas • **210 MW**
- ▲ Walter M. Higgins Generating Station • Stateline • **530 MW**