Frank A. Tracy Generating Station

Location: 17 miles east of Reno, Nevada

Peak Generating Capacity: 885 Megawatts (Summer Peak)
(Tracy Station Complex includes the Clark Mountain Combustion Turbines)

Plant Description: The Frank A. Tracy Generating Station is a multi-technology, clean-burning natural gas-fueled power plant complex that includes eight individual generating units with in-service dates ranging from 1974 to 2008. The original two generating units, which have been shut down and are in the process of being dismantled, were completed in 1963 and 1965.

The newest and most energy-efficient units are a stand-alone combined-cycle power production system that consists of two 7FA General Electric combustion turbine generators that recycle their exhaust to generate additional electricity with a separate General Electric D11 steam turbine. These three combined-cycle units can generate about 541 megawatts of electricity during the hottest times of the year and more electricity during the cooler months.

An earlier combined-cycle system was completed in 1996 that consists of a general Electric combustion turbine (6FA) that improves its efficiency by recycling its exhaust to power a General Electric steam turbine for a total of 108 megawatts when duct burners are used.

The 1974 unit uses a Babcock and Wilcox steam boiler that drives a Westinghouse turbine generator.

The Tracy Station complex includes two 66-megawatt simple-cycle generating units that were completed in 1994. Also known as the Clark Mountain Combustion Turbines, these General Electric 7EAs are “peaking” units that are primarily used during the hottest times of the year and the hottest times of the day. They primarily burn natural gas, but can run on diesel oil in an emergency.

Employment: Approximately 60 employees

INTERESTING FEATURES:

- The complex can produce enough electricity to serve more than a half million households.
- Unlike some conventional power plants that use substantial amounts of water for cooling, the largest combined-cycle units use a six-story-high dry cooling system. This system, which uses 36-feet in diameter fan blades, can make the same amount of electricity with a mere 7 percent of water used by conventional water-cooled facilities.
- The combined-cycle plant at the Frank A. Tracy Generating Station received a “Top Plant Award” from POWER Magazine in 2008, a “Best Performer Award” from the Electric Utility Cost Group in 2012, and a “Best Practices Award” from COMBINED CYCLE Journal in 2013.
- NV Energy annually provides approximately $3.7 million in tax revenue to Storey County that benefits general county operations, schools, libraries and other civic services.
Generating Resources

- 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

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