Location: Las Vegas, Nevada

Peak Generating Capacity: 1,103 Megawatts

Plant Description: The Edward W. Clark Generating Station dates back to 1954 and is the oldest steam-generated power plant in Nevada. Today, it is a multi-technology natural gas-fueled power generating complex that includes a total of 19 generating units with in-service dates ranging from 1973 to 2008. The oldest unit is a General Electric MS-7000 series turbine generator that is used to help meet high summer electricity demands.

The plant has four upgraded Westinghouse 501B6 combustion turbine generators that were originally installed in the late 70s and early 80s. These highly efficient and low-emission units now recycle their exhaust heat to power a pair of Mitsubishi steam turbines with Westinghouse generators to make additional electricity for NV Energy customers.

The newest plant additions include 12 FT8 Pratt & Whitney peaking units that can provide up to 600 megawatts of electricity to meet short-term customer needs. These quick-start units are similar to the turbines that power jet airplanes.

Employment: Approximately 30 employees

Interesting Features:

- At any one time, the plant can produce enough electricity to serve approximately 665,000 Nevada households.

- Upon completion of major plant renovation work and new unit installations between 2007 and 2009, the plant roughly doubled its generating capacity and reduced its emissions by half.

- The plant includes a 75-kW high-concentration solar photovoltaic system that was done in cooperation with the University of Nevada and the National Renewable Energy Laboratory.

- The Clark Station received a Top Plant Award from POWER Magazine in 2009.

- 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

One Nevada Transmission Line Intertie

Clark Mtn.
Harry Allen
Silverhawk
Clark Lenzie
LVGS
Nellis
Higgins
Clark
Sun Peak
Chuck Lenzie
To ▲ Navajo (east of Page, AZ)

rev. 2017-04-06