

## **NORTH FORK STANISLAUS RIVER, HYDROELECTRIC DEVELOPMENT PROJECT**

Water and water rights have always been valuable commodities in California, where seasonal rainfall and periodic droughts create the need for large-capacity storage reservoirs. Calaveras County Water District (CCWD) obtained water rights for the North Fork Stanislaus River in the 1940's and first envisioned the idea of building water storage facilities in the river drainage basin during the 1950's.

The North Fork Stanislaus River Project (Project) was constructed between 1985 and 1990, combining water usage and electric power in an environmentally sound manner, while providing recreation for Californians. CCWD holds the project license and the Northern California Power Agency (NCPA) operates the facilities.

Spanning 60 miles of the western slope of the Sierra Nevada, the Project ranges from elevations of 1,099 to 6,700 feet. The primary power production facility of the Project is the Collierville Powerhouse at Clarks Flat.

A large volume of water falling from a height of 2,270 feet has enough energy to rotate two turbine generators and produce 252 megawatts of electric energy. Approximately 40 miles of 230 kilovolt transmission lines were built to connect the Collierville Powerhouse with PG&E's Bellota substation. From Bellota, the power is transmitted to the distribution systems of the NCPA members.



The Collierville Powerhouse at Clarks Flat

At a cost of \$276 million upon completion, it was the largest lump sum design/construct or "turnkey" project in U.S. history. The contractor was Sierra Constructors, a joint venture of Guy F. Atkinson and Harrison Western. Major equipment suppliers came from as far away as Japan and Austria.

CCWD and NCPA successfully guided the Project to completion and began operation in 1989. Revenues from power generation have and will continue to help the CCWD finance future water storage and distribution facilities for its service area in Calaveras County.