Hydroelectric Power

Hydroelectric power in California is broken down into two categorie facilities larger than 30 megawatts (MW), and small hydro. Small h renewable energy under the Renewables Portfolio Standard. The a production in California varies yearly and depends on rainfall.

CALIFORNIA POWER GENERATION AND POWER SOURCES

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Geothermal Energy

Hydroelectric Power

Hydroelectric Facilities

Hydro facilities smaller than 30 MW of generation capacity are small hydro. Utilities such as Southern California Edison, Pacific Gas and Electric Company, and the Sacramento Municipal Utility District operate the small hydro facilities.

Large hydro projects are those larger than 30 megawatts (MW) of generation capacity. The U.S. Bureau of Reclamation and the state's Department of Water Resources operate large hydro plants in California such as Folsom Dam, Oroville Dam, and Shasta Dam.

California's hydro generation plants are mostly in the eastern mountain ranges. The state also imports its hydro-generated electricity from the Pacific Northwest and the Southwest.

Types of Conventional Hydroelectric Facilities

- **Dams** (or pondage) facilities raise the water level of a stream or river to an elevation necessary to create a sufficient elevation difference. Dams can be constructed of earth,

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concrete, steel, or a combination of such materials. Dams may create secondary benefits such as flood control, recreation opportunities, and water storage.

- **Run-of-river**, or water diversion, facilities divert water from a natural channel to a course with a turbine and usually return the water to the channel downstream of the turbine.
- **Pumped storage** facilities pump water during off-peak demand periods from a reservoir at a lower elevation for storage in a reservoir at a higher elevation. Electricity is generated during peak demand periods by releasing the pumped water from the higher reservoir so it flows downhill through the hydraulic turbine(s) connected to generators. During the off-peak pumping cycle, the pumped storage facility consumes electricity.

Map of California Hydroelectric Power Plants
Federal Energy Regulatory Commission
U.S. Fish and Wildlife Service
U.S. Fish and Wildlife Service, Yreka, California Office - Klamath Hydro Page

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