State Water Project-Power System

- The SWP is the largest single user of electrical energy in California.
- CDWR manages its power supply for the purpose of pumping water.
- The SWP is the largest user of the California transmission grid.
- CDWR is an independent entity, interconnected with the western U.S. transmission grid. It dispatches its own loads and resources.
- CDWR currently ranks as the twelfth largest public-owned electric system in the United States.
- CDWR minimizes the cost of power by scheduling most pumping during off-peak periods (10:00 P.M. to 8:00 A.M.) when power costs are low, and exchanging and trading to other utilities during on-peak periods (8:00 A.M. to 10:00 P.M.) when power values are high.
- The SWP provides its own ancillary services.
- The CDWR is a scheduling coordinator and interfaces with the Independent System Operator (ISO).

State Water Project-Water Supply System

- The SWP is the largest state-built, multipurpose water project in the U.S.
- The SWP provides water to 20 million people in California (two-thirds of California's population) and 600,000 acres of farmland
- The SWP has 28 dams and reservoirs, 20 pumping plants, 3 pumping-generating plants, and nearly 660 miles of aqueducts.
- Current water deliveries are up to 3.6 million acre-feet per year.
- In the rainy season (winter and spring), the CDWR temporarily stores water and then delivers it throughout the rest of the year to State Water Contractors.

Power Supply

Total Generating Capacity 2,178 MW

Power Plants:

8 Hydroelectric (1,708 MW)
1 Thermal (250 MW, Joint Venture with NPC)

Contractual Power Plants:

1 Hydro (190 MW, owned by KRCD)
5 Small Hydro (30 MW, owned by MWDSC)
Entitlement from Castaic (up to 214 MW owned by LADWP)

Transmission Arrangements

Long term contracts;
PG&E in NP15
El Dorado to Vincent 235 MW with SCE
RG-4 to El Dorado 235 MW with NPC

Power Operations in a typical year

Power Generation	7.1 billion kWh
Power Purchases	2.4 billion kWh
Power Sales	2.9 million kWh

Power Demand

Connected Pumping* Facilities	2,880 MW
Highest Historic Pumping Demand	2,400 MW
Highest Historic Energy Pumping Usage	to 8.5 billion kWh/year

*Includes pumping-generating

Financial Data

- 29 State Water Contractors repay SWP costs allocated to water supply.
- Total SWP Capital Cost through 2002 $5.9 billion.
- Total SWP Capital Cost Repaid through 2002 $2.1 billion.
- Annual Water Charges: $700 million. Two-Third for power-related charges.