



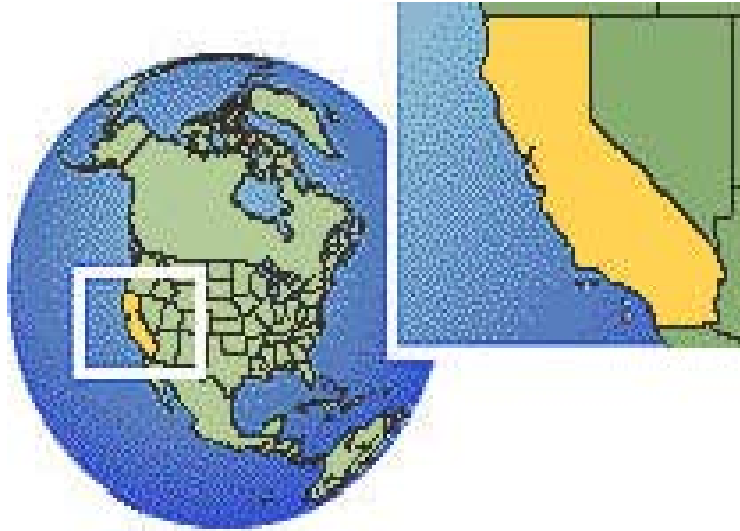
**SMUD**

SACRAMENTO MUNICIPAL UTILITY DISTRICT

*The Power To Do More.*

**SACRAMENTO MUNICIPAL UTILITY DISTRICT**  
**Sacramento, California, USA**

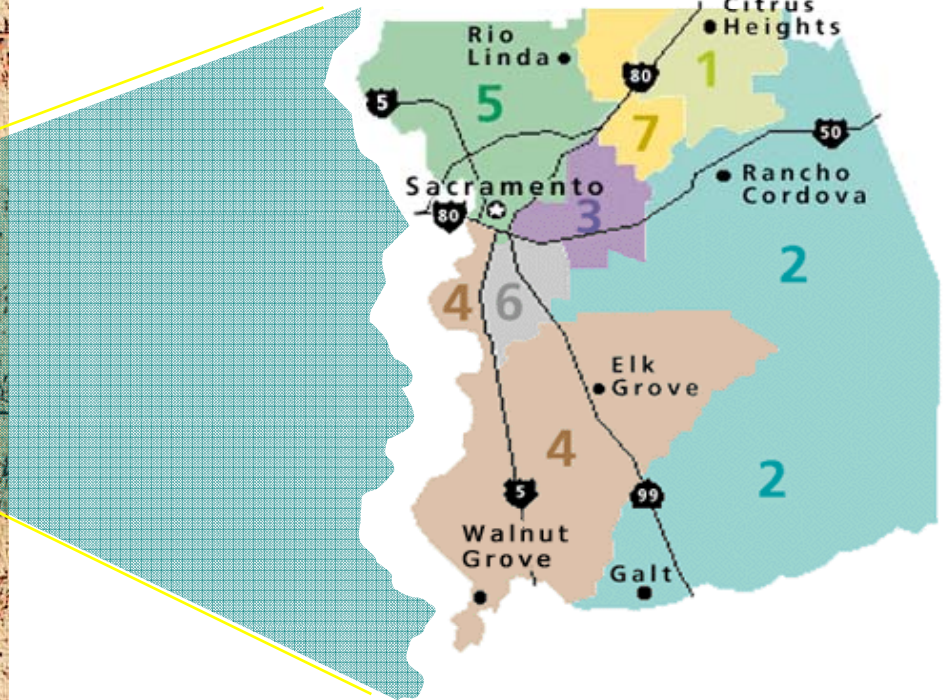
# California



- Most populous state in the USA
- Area 159,000 sq. mi
- Population 36,000,000
- State since 1850 (31<sup>st</sup>)
- State economy among largest in the world
- Peak energy usage  
53,896 MW



# Sacramento Municipal Utility District *Serving the Capital Region*



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# Sacramento



- Capital of California
- Gold discovered nearby in 1848
- Population 460,000 (city) and nearly 2 million in the metropolitan area
- According to TIME Magazine article the most diverse city in America – U.S. Census
- Government center, high tech and agriculture
- SMUD peak energy load 3,280 MW



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# Sacramento Municipal Utility District



- Established December 31, 1946
- Service area 900 sq. miles
- Area population 1.4 million
- Total customers 585,500
- Total employees 2,197
- Revenues \$1.48 billion
- 5<sup>th</sup> largest municipal in U.S.



# Governance Profile

- Seven member Board of Directors
- Popularly elected by ward
- Staggered four-year terms
- Representation  $\cong$  200,000 residents per Director
- Serve as regulatory body in accordance with statutory authority
- Decide all issues of policy
- Establish rates and conditions of service



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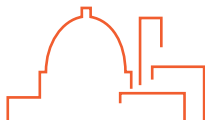
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# Our Customers

- 585,500 service accounts
- 1.4 million residents
- 10.9 billion Kilowatt-hours in retail energy sales
- Total Residential sales: 4.7 billion kWh (43% of sales)
- Total Commercial/Industrial and Agricultural sales: 6.2 billion kWh (57% of sales)
- Average kWh sale per residential customer: 8,982 kWh/yr



\*J.D. Power Rated #1 Residential & Commercial in the U.S.



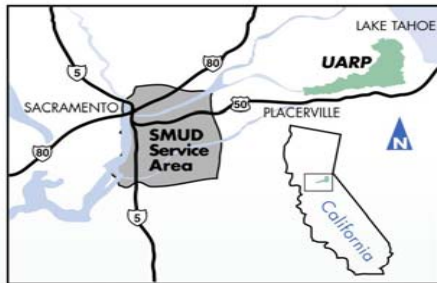
# Energy Resource Profile



- Renewable Energy 20 %  
(Biomass, Geothermal, Small hydro, Solar & Wind)
- Coal 1 %
- Large Hydro 17 %
- Natural Gas 62 %
- Nuclear < 1 %



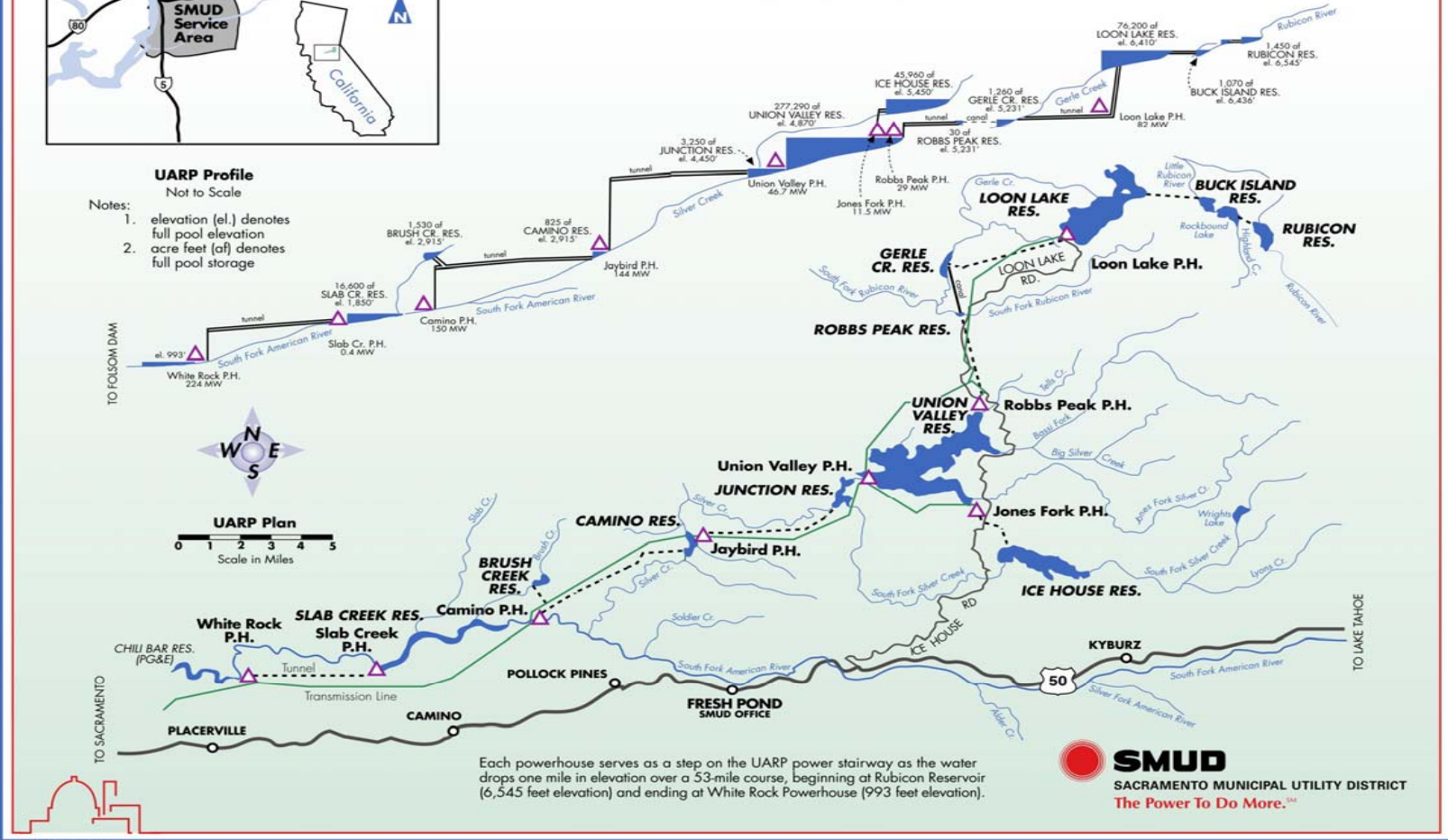




# SACRAMENTO MUNICIPAL UTILITY DISTRICT Upper American River Project

Federal Energy Regulatory Commission Project No. 2101

- UARP Profile**  
Not to Scale
- Notes:
1. elevation [el.] denotes full pool elevation
  2. acre feet [af] denotes full pool storage



1066-00 10/31/00



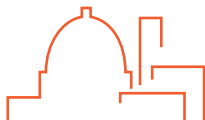
# Load Profile

- **Peak Loads**

- 2005 Peak: 2,959 megawatts
- 2006 Peak: 3,280 megawatts
- 2007 Peak: 3,099 megawatts
- 2008 Peak: 3,086 megawatts
- 2009 Peak: 2,791 megawatts

- **50% of Load is weather-sensitive**

- Normal January peak: 1,550 megawatts
- Normal April peak: 1,350 megawatts
- Normal July peak: 2,600 megawatts
- Normal September peak: 2,300 megawatts
- Normal November peak: 1,400 megawatts



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# Transmission/Distribution System Profile



- Bulk Substations 10
- Transmission Lines (circuit miles) 473
- Distribution Substations 228
- Distribution Lines (circuit miles) 9,818
  - Underground lines 5,916
  - Overhead lines 3,902
- Transmission Voltages 230 & 115kV
- Distribution Voltages 69, 21, 12 & 4kV



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# Questions?



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# More Information

[www.smud.org](http://www.smud.org)

[www.ourgreencommunity.org](http://www.ourgreencommunity.org)



## Thank You

Jaspal Deol, P.E.

Manager, T & D Substations, Network & Civil

