

Energy Efficiency and Electric Infrastructure in the State of California

The simple choice for energy efficiency.



In any given state, there are a range of stakeholders well-positioned to contribute to the design and delivery of effective energy efficiency programming. This factsheet provides an overview of relevant entities in the state of California, along with highlights of state policies and practices related to energy efficiency. The entity types described and highlighted below are typically involved in electricity and/or energy efficiency related matters in states. Other important stakeholders such as trade associations, industry, and local businesses are not included as they vary significantly from state to state.

Electric Market Overview

Electric Utilities

Privately- and publicly-owned electric utilities generate, transmit, distribute, and/or sell electricity primarily for use by the public. These include investor-owned electric utilities, municipal and state utilities, Federal electric utilities, and rural electric cooperatives.¹ The following summarizes electric utilities in California by type:

- *Investor-Owned Electric Utilities:*
Bear Valley Electric Service: www.bves.com
Liberty Utilities (a.k.a. CalPeco for California Pacific Electric Co.):
<http://www.libertyutilities.com/west/?region=CA&utility=Electricity>
Pacific Gas & Electric Company (PG&E): www.pge.com
PacifiCorp (PG&E): www.pacificcorp.com
San Diego Gas & Electric Company (SDG&E): www.sdge.com
Southern California Edison Company (SCE): www.sce.com
- *Municipally-Owned/Publicly-Owned Utilities:* California has 46 municipally- or publicly-owned electric systems in the state
- *Member-Owned (Electric Cooperative):* California has 4 distribution electric cooperatives
Other: 5 Retail Power Marketer; 3 State; 3 Wholesale Power Marketer²

Electric utility service areas (as available): http://www.energy.ca.gov/maps/serviceareas/Electric_Service_Areas_Detail.pdf

Status of Electric Industry Restructuring

Vertically integrated utilities are responsible for generation, transmission and distribution of power to customers. In the 1990's, many states began to unbundle the electricity supply and distribution functions of investor-owned utilities on the theory that only the wires (the fixed network system) constituted a natural monopoly, while the generation of power did not. In states that have undergone restructuring, individual retail customers can choose their supplier but still receive delivery over the power lines of the local utility.³

- Restructuring was suspended in California. <http://www.eia.gov/electricity/policies/restructuring/california.html>

Regional Transmission Organization (RTO)/Independent System Operator(ISO)

About 60% of U.S. electric power supply is managed by RTOs or ISOs: independent, membership-based organizations that ensure reliability and usually manage the regional electric supply market for wholesale electric power. In the rest of the country, electricity

¹ Source: EIA

² Source): EIA 2013 Form EIA-861 Utility Data (<http://www.eia.gov/electricity/data/eia861/>) and California Energy Commission (<http://energyalmanac.ca.gov/electricity/utilities.html#300>)

³ Source: The Regulatory Assistance Project (RAP)

systems are operated by individual utilities or utility holding companies. RTOs/ISOs engage in long-term planning that involves identifying effective, cost-efficient ways to ensure grid reliability and system-wide benefits. Coordination and cooperation between utilities, state PUCs and RTOs/ISOs is often required to advance energy efficiency goals.⁴

- California is part of the California ISO (CAISO): <http://www.caiso.com>

Utility Oversight and Planning

Utility Oversight

Public utility commissions (PUCs) oversee goals, investments, and ratemaking for investor-owned electric utilities. Most of this oversight is conducted via specific regulatory proceedings. Municipally-owned utilities are governed by a local city council or an elected commission, and member-owned/cooperative utilities are governed by a board elected by members. In a few states, PUCs have oversight over some aspects of municipally and member-owned utility performance such as energy efficiency resource standards.⁵

- California Public Utilities Commission regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies. <http://www.cpuc.ca.gov/puc/>

Integrated Resource/Procurement Planning

Integrated resource plans (IRPs) are utility plans for meeting forecasted annual peak and energy demand through a portfolio of supply-side and demand-side resources over a specified future period. As of early 2015, integrated resource planning is required or present in more than 30 states, including most vertically integrated/non restructured states. In states that are restructured, regulated distribution-only utilities may be required to develop procurement plans to service customers that do not choose a competitive retail supplier. Energy efficiency is considered as a demand-side resource but the degree to which it is included in resource/procurement planning is influenced by other factors including policies such as energy efficiency resource standards or requirements that all cost effective energy efficiency be considered.⁶

- California does not have Integrated Resource Planning, however, it does engage in Long-Term Procurement Planning (LTTP). The LTTP proceeding is an umbrella proceeding where the California Public Utilities Commission (CPUC) considers all of its electric resource procurement policies and programs in an integrated manner. Every two years the CPUC assesses the system and local resource needs of California's three largest investor owned electric utilities – SCE, PG&E, and SDG&E – over a ten-year horizon. The CPUC also determines what changes should be made to current procurement rules and examines the utilities' proposed procurement plans. <http://www.ora.ca.gov/ltp.aspx>

Statewide Planning Process

States sometimes undertake executive or legislatively driven statewide energy planning processes. These plans may be completely independent of utilities or may explicitly engage utilities.

- Integrated Energy Policy Report (IEPR): <http://www.naseo.org/Data/Sites/1/documents/stateenergyplans/CEC-100-2013-001-CMF.pdf>
- California Energy Efficiency Strategic Plan (2011): http://www.energy.ca.gov/ab758/documents/CAEnergyEfficiencyStrategicPlan_Jan2011.pdf

Energy Efficiency Potential Studies

Energy efficiency potential studies determine the amount of technical, economic, and achievable potential for energy efficiency in a region, state, or utility service territory. Energy efficiency potential studies may be undertaken by state agencies or energy efficiency advocacy organizations, or by utilities as part of or to inform compliance with a regulatory requirement. The following are recent energy efficiency potential studies:

⁴ Source: [EPA Energy and Environment Guide to Action](#)

⁵ Sources: [EPA Energy and Environment Guide to Action](#) and RAP

⁶ Source: [EPA Energy and Environment Guide to Action](#)

- California Energy Efficiency Potential and Goals Study for 2015 and Beyond: <http://www.cpuc.ca.gov/NR/rdonlyres/0C4CF052-0E02-4776-A69A-88C619AC8DFB/0/2015andBeyondPotentialandGoalsStudyStage1FinalReport92515.pdf>
- PacifiCorp Demand Side Management Potential Assessment for 2015-2034: <http://www.pacificorp.com/env/dsm.html>
- PacifiCorp Assessment of Long-Term System-Wide Potential for Demand-Side and Other Supplemental Resources 2013-2032: http://www.pacificorp.com/content/dam/pacificorp/doc/Energy_Sources/Demand_Side_Management/DSM_Potential_Study/PacifiCorp_DSMPotential_FINAL_Vol%20I.pdf
- Incorporating Energy Efficiency into Western Interconnection Transmission Planning: <http://emp.lbl.gov/sites/all/files/lbnl-6578e.pdf>
- LADWP Territorial Potential Draft Report Volume 1 (2014): <https://www.ladwp.com/docs/opladwpccb409908>

Energy Efficiency Policies/Activities

Statewide Clean Energy Policy/Energy Efficiency Energy Resource Standard(s)

Energy efficiency resource standards (EERSs) require obligated parties—usually regulated retail distributors of electricity—to meet a specific portion of their electricity demand through energy efficiency. As of March 2015, 27 states have some type of energy efficiency requirement or goal.⁷

- California has a mandatory energy efficiency resource standard.

Current Utility-Administered Energy Efficiency Programs

Energy efficiency is regarded as an important utility resource with co-benefits that include reducing air pollution, saving customers on utility bills, and creating local jobs. While the majority of large-scale energy efficiency programs are funded by utility ratepayers, program administration may be by the utility, the state, an independently awarded program administrator or a combination of entities. Below are available links related to ratepayer-funded energy efficiency programs offered in the state⁸:

- The CPUC has established an energy efficiency proceeding, Rulemaking R.13-11-005, which includes ten-year energy efficiency "rolling portfolios" for SCE, PG&E, SDG&E. <http://www.cpuc.ca.gov/PUC/energy/Energy+Efficiency/Current+Proceeding+Activity.htm>
- *Program Administrator:* Bear Valley Electric Service: <https://www.bves.com/efficiency-&-environment/residential-programs/>
Most recent program filing: <http://www.cpuc.ca.gov/NR/rdonlyres/A096A528-3BFA-47AE-BAC4-9A7537026B4F/0/A1507BVESDRPApplication01July201500309877xBA8E1.pdf>
ENERGY STAR Partner since 2002
- *Program Administrator:* Liberty Utilities (a.k.a. CalPeco for California Pacific Electric Co.): http://www.libertyutilities.com/west/saving/energy_efficiency.html
Most recent program filing: <http://www.cpuc.ca.gov/NR/rdonlyres/2E4EC6BA-8303-4035-99AA-22F1AC7E72EA/0/A1507LUDRPAApplication7115.pdf>
ENERGY STAR Partner since 2012
- *Program Administrator:* PacifiCorp: <https://www.pacificpower.net/res/sem/california.html> and <https://www.pacificpower.net/bus/se/california.html>
Most recent program filing: <https://www.pacificpower.net/about/irp.html>
ENERGY STAR Partner since 2001
- *Program Administrator:* Pacific Gas & Electric Company: <http://www.pge.com/en/myhome/saveenergymoney/rebates/index.page> and <http://www.pge.com/en/mybusiness/save/rebates/index.page?>
Most recent program filing: <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M089/K641/89641253.PDF>
ENERGY STAR Partner since 2002

⁷ Ibid.

⁸ For other energy efficiency program offerings in the state, visit: <http://programs.dsireusa.org/system/program?state=ca>

- *Program Administrator:* San Diego Gas & Electric Company: <http://www.sdge.com/buyers-guide/399> and <http://www.sdge.com/rebates-finder/earn-rebates-your-improvements>
Most recent program filing: <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M089/K322/89322604.PDF>
ENERGY STAR Partner since 2000
- *Program Administrator:* Southern California Edison Company: <https://www.sce.com/wps/portal/home/residential/rebates-savings/rebates> and <https://www.sce.com/wps/portal/home/business/savings-incentives>
Most recent program filing: <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M089/K324/89324031.PDF>
ENERGY STAR Partner since 1997
- *Program Administrator:* Sacramento Municipal Utility District: <https://www.smud.org/en/residential/save-energy/> and <https://www.smud.org/en/business/save-energy/>
Most recent program filing:
ENERGY STAR Partner since 2002
- *Program Administrator:* Los Angeles Department of Water and Power: <https://www.ladwp.com/ladwp/faces/ladwp/residential/r-savemoney> and <https://www.ladwp.com/ladwp/faces/ladwp/commercial/c-savemoney>
Most recent program filing:
https://www.ladwp.com/cs/idcplq?IdcService=GET_FILE&dDocName=OPLADWP047230&RevisionSelectionMethod=LatestReleased
ENERGY STAR Partner since 2001

Other Key Stakeholders

State Air Office:

- California Air Resources Board: <http://www.arb.ca.gov/>

State Energy Office:

- California Energy Commission: <http://www.energy.ca.gov/>

Consumer Advocate(s)

Most states also have one or more consumer advocacy organizations. Consumer Advocates are often concerned with maintaining low rates and ensuring equitable treatment of all customer classes⁹.

- The Utility Reform Network: <http://www.turn.org/>
- Office of Ratepayer Advocates: <http://www.ora.ca.gov/>

Others Public Interest Groups

Groups representing environmental and other public interests are often involved in providing public input or technical expertise during regulatory proceedings or stakeholder processes. The following energy efficiency organizations/nonprofits are active in the state or region:

- Western Climate Initiative: <http://www.wci-inc.org/>
- Pacific Coast Collaborative: <http://www.pacificcoastcollaborative.org>
- Natural Resources Defense Council: <http://www.nrdc.org/>

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* Revised December 21, 2015. To alert the U.S. EPA of substantial policy changes or program updates, please contact eeaccountmanager@icfi.com

⁹ [EPA Energy and Environment Guide to Action](#)